

## Appendix 2:

# Bonneville's Open Access Transmission Tariff

**BONNEVILLE POWER ADMINISTRATION**  
**TRANSMISSION SERVICES**

**OPEN ACCESS TRANSMISSION TARIFF**

Effective Date: October 1, 2025

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## **I. COMMON SERVICE PROVISIONS**

### **1 Definitions**

#### **1.1 Affiliate:**

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.

#### **1.2 Ancillary Services:**

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.

#### **1.3 Annual Transmission Costs: (Intentionally omitted.)**

#### **1.4 Application:**

A request by an Eligible Customer for transmission service pursuant to the provisions of the Tariff.

#### **1.5 Balancing Authority (BA):**

The responsible entity that integrates resource plans ahead of time, maintains load-Interchange-generation balance within a BAA, and supports interconnection frequency in real time.

#### **1.6 Balancing Authority Area (BAA):**

The collection of generation, transmission, and loads within the metered boundaries of the BA. The BA maintains load-resource balance within this area. For purposes of this Tariff, "BAA" shall have the same meaning as "Control Area."

**1.7 Balancing Authority Area Resource:**

A resource marketed by BPA that can provide or voluntarily contracted for by BPA to provide EIM Available Balancing Capacity, and that can provide regulation and load following services to enable the BPA EIM Entity to meet reliability criteria.

**1.8 Bid Cost Recovery (BCR):**

The MO EIM settlements process through which the BPA EIM Participating Resources recover their bid costs.

**1.9 BPA:**

The Bonneville Power Administration

**1.10 BPA BAA:**

The BAA operated by BPA.

**1.11 BPA BAA Transmission Owner:**

A transmission owner, other than BPA, that owns transmission facilities in BPA's BAA.

**1.12 BPA EIM Business Practice (BPA EIM BP):**

The business practice posted on BPA's OASIS that contains procedures related to BPA's implementation of EIM and the rights and obligations of Transmission Customers and customers under Attachments L and N ("GI Customers") related to EIM.

**1.13 BPA EIM Entity:**

The Transmission Provider in performance of its role as an EIM Entity under the MO Tariff and this Tariff, including, but not limited to, Attachment Q.

**1.14 BPA EIM Entity Scheduling Coordinator:**

The Transmission Provider or the entity selected by the Transmission Provider who is certified by the MO and who enters into the MO's EIM Entity Scheduling Coordinator Agreement.

**1.15 BPA EIM Participating Resource:**

A resource, aggregation of resources, or a portion of a resource: (1) that has been certified in accordance with Attachment Q by the BPA EIM Entity as eligible to participate in the EIM; and (2) for which the generation owner and/or operator, or designated marketing agent, enters into the MO's EIM Participating Resource Agreement.

**1.16 BPA EIM Participating Resource Scheduling Coordinator:**

A Transmission Customer with one or more BPA EIM Participating Resource(s) or a third-party designated by the Transmission Customer with one or more BPA EIM Participating Resource(s), that is certified by the MO and enters into the MO's EIM Participating Resource Scheduling Coordinator Agreement.

**1.17 BPA Interchange Rights Holder:**

A Transmission Customer who has informed the BPA EIM Entity that it is electing to make reserved firm or non-firm PTP transmission capacity available for EIM Transfers without compensation.

**1.18 CAISO BAA or CAISO Controlled Grid:**

The system of transmission lines and associated facilities of the CAISO participating transmission owners that have been placed under the CAISO's operational control.

**1.19 California Independent System Operator Corporation (CAISO):**

A state-chartered, California non-profit public benefit corporation that operates the transmission facilities of all CAISO participating transmission owners and dispatches certain generating units and loads. The CAISO is the MO for the EIM.

**1.20 Cluster Study:**

A process for studying a group of transmission service requests in the aggregate. A Cluster Study may be used for a System Impact Study, Facilities Study, environmental review, or other study or analysis that is necessary to determine system modifications needed to provide service.

**1.21 Commission:**

The Federal Energy Regulatory Commission.

**1.22 Completed Application:**

An Application that satisfies all of the information and other requirements of the Tariff, including any required deposit.

**1.23 Control Area:**

An electric power system or combination of electric power systems to which a common automatic generation control scheme is applied in order to:

1. match, at all times, the power output of the generators within the electric power system(s) and capacity and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);
2. maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;



3. maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and
4. provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

**1.24 Curtailment:**

A reduction in firm or non-firm transmission service in response to a transfer capability shortage as a result of system reliability conditions.

**1.25 Delivering Party:**

The entity supplying capacity and energy to be transmitted at Point(s) of Receipt.

**1.26 Designated Agent:**

Any entity that performs actions or functions on behalf of the Transmission Provider, an Eligible Customer, or the Transmission Customer required under the Tariff.

**1.27 Direct Assignment Facilities:**

Facilities or portions of facilities that are constructed by the Transmission Provider for the sole use/benefit of a particular Transmission Customer requesting service under the Tariff. Direct Assignment Facilities shall be specified in the Service Agreement that governs service to the Transmission Customer.

**1.28 Dispatch Instruction:**

An instruction by the MO for an action with respect to a specific BPA EIM Participating Resource or Balancing Authority Area Resource for increasing or decreasing its energy supply or demand.

**1.29 Dispatch Operating Point:**

The expected operating point, in MW, of a BPA EIM Participating Resource that has received a Dispatch Instruction from the MO or a Balancing Authority Area

Resource to which the BPA EIM Entity has relayed a Dispatch Instruction received from the MO. For purposes of Attachment Q of this Tariff, the Dispatch Operating Point means the change, in MW output, of (i) a BPA EIM Participating Resource due to an EIM bid being accepted and the BPA EIM Participating Resource receiving a Dispatch Instruction; or (ii) a Balancing Authority Area Resource for which a Dispatch Instruction has been issued by the CAISO with respect to EIM Available Balancing Capacity. The Dispatch Operating Point is expressed either as a negative MW quantity for the downward movement of generation, or a positive MW quantity for the upward movement of generation.

### **1.30 Dynamic Transfer:**

The provision of the real-time monitoring, telemetering, computer software, hardware, communications, engineering, energy accounting (including inadvertent Interchange), and administration required to electronically move all or a portion of the real energy services associated with a generator or load out of one BAA into another. A Dynamic Transfer can be either:

1. a Dynamic Schedule: a telemetered reading or value that is updated in real time and used as a schedule in the AGC/ACE equation and the integrated value of which is treated as an after-the-fact schedule for Interchange accounting purposes; or
2. a Pseudo-Tie: a functionality by which the output of a generating unit physically interconnected to the electric grid in a native BAA is telemetered to and deemed to be produced in an attaining BAA that provides BA services for and exercises BA jurisdiction over the generating unit.

**1.31 Eligible Customer:**

- i. Any electric utility (including the Transmission Provider and any power marketer), Federal power marketing agency, any person generating electricity for sale or resale is an Eligible Customer under the Tariff. Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico. However, with respect to transmission service that the Commission is prohibited from ordering by Section 212(h) of the Federal Power Act, such entity is eligible only if the service is provided to such entity's customer that qualifies as an Eligible Customer pursuant to subsections ii or iii below.
- ii. Pursuant to a voluntary offer by the Transmission Provider, a retail customer of a distribution utility taking unbundled transmission service pursuant to a state retail access program (or taking unbundled transmission service as offered service by its distribution utility) or any Federal entity eligible under law to purchase Federal power is an Eligible Customer under the Tariff.
- iii. A direct service industry to which the Bonneville Power Administration is authorized to sell power under the Pacific Northwest Electric Power Planning and Conservation Act shall be an Eligible Customer under the Tariff.

**1.32 EIM Area:**

The combination of BPA's BAA, the CAISO BAA, and the BAAs of any other EIM Entities.

**1.33 EIM Available Balancing Capacity:**

Any upward or downward capacity from a Balancing Authority Area Resource that has not been bid into the EIM and is included in the BPA EIM Entity's Resource Plan.

**1.34 EIM Entity:**

a) A BA, other than the BPA EIM Entity, that enters into the MO's EIM Entity Agreement to enable the EIM to occur in its BAA; or (b) the Canadian EIM Entity.

**1.35 EIM Transfer:**

The transfer of real-time energy resulting from a Dispatch Instruction: (1) between the BPA BAA and the CAISO BAA; (2) between the BPA BAA and an EIM Entity BAA or Canadian EIM Entity; (3) between the CAISO BAA and an EIM Entity BAA or Canadian EIM Entity using transmission capacity available in the EIM; or (4) between an EIM Entity BAA or Canadian EIM Entity and any other EIM Entity BAA using BPA transmission capacity made available in the EIM.

**1.36 Energy Imbalance Market (EIM):**

The real-time market to manage transmission congestion and optimize procurement of imbalance energy (positive or negative) to balance supply and demand deviations for the EIM Area through economic bids submitted by EIM Participating Resource Scheduling Coordinators in the fifteen-minute and five-minute markets.

**1.37 e-Tag:**

An electronic tag associated with an Interchange Schedule in accordance with the requirements of WECC.

**1.38 Facilities Study:**

An engineering study conducted by the Transmission Provider to determine the required modifications to the Transmission Provider's Transmission System, including the cost and scheduled completion date for such modifications, that will be required to provide the requested transmission service.

**1.39 Firm Point-To-Point Transmission Service:**

Transmission Service under this Tariff that is reserved and/or scheduled between specified Points of Receipt and Delivery pursuant to Part II of this Tariff.

**1.40 Forecast Data:**

Information provided by Transmission Customers regarding expected load (as determined pursuant to Section 4.2.4.3 of Attachment Q of this Tariff), generation, Intrachange, and Interchange, as specified in Section 4.2.4 of Attachment Q and the BPA EIM BP. The Transmission Customer Base Schedule includes Forecast Data that is used by the BPA EIM Entity as the baseline by which to measure Imbalance Energy for purposes of EIM settlement.

**1.41 Good Utility Practice:**

Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility 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, including those practices required by Federal Power Act Section 215(a)(4).

**1.42 Imbalance Energy:**

The deviation of supply or demand from the Transmission Customer Base Schedule, positive or negative, as measured by metered generation, metered load, or realtime Interchange or Intrachange schedules.

**1.43 Instructed Imbalance Energy (IIE):**

A type of Imbalance Energy that occurs when changes are made to a resource, Interchange, or Intrachange schedule after the submission of the financially binding Transmission Customer Base Schedule.

**1.44 Interchange:**

E-Tagged energy transfers that cross Balancing Authority boundaries, not including EIM Transfers.

**1.45 Interruption:**

A reduction in non-firm transmission service due to economic reasons pursuant to Section 14.7.

**1.46 Intrachange:**

E-Tagged energy transfers within a Balancing Authority boundary, not including real-time actual energy flows associated with Dispatch Instructions.

**1.47 Load Aggregation Point (LAP):**

A set of Pricing Nodes that is used for the submission of bids and settlement of demand in the EIM.

**1.48 Load Ratio Share: (Intentionally omitted)**

**1.49 Load Shedding:**

The systematic reduction of system demand by temporarily decreasing load in response to transmission system or area capacity shortages, system instability, or voltage control considerations under Part III of the Tariff.

**1.50 Locational Marginal Price (LMP):**

Refer to the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

**1.51 Long-Term Firm Point-To-Point Transmission Service:**

Firm Point-To-Point Transmission Service under Part II of the Tariff with a term of one year or more.

**1.52 Manual Dispatch:**

An operating instruction issued by the BPA EIM Entity to a Transmission Customer with a BPA EIM Participating Resource or a Non-Participating Resource in BPA's BAA, outside of the EIM optimization, when necessary to address reliability or operational issues in BPA's BAA that the EIM is not able to address through economic dispatch and congestion management.

**1.53 Market Operator (MO):**

The CAISO.

**1.54 Measured Demand:**

Refer to the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

**1.55 Metered Demand:**

Refer to the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

**1.56 MO Tariff:**

Those portions of the CAISO's approved tariff, as such tariff may be modified from time to time, that specifically apply to the operation, administration, settlement, and oversight of the EIM.

**1.57 Native Load Customers:**

The wholesale and retail power customers of the Transmission Provider on whose behalf the Transmission Provider, by statute, franchise, regulatory requirement, or contract, has undertaken an obligation to construct and operate the Transmission Provider's system to meet the reliable electric needs of such customers.

**1.58 Network Customer:**

An entity receiving transmission service pursuant to the terms of the Transmission Provider's Network Integration Transmission Service under Part III of the Tariff.

**1.59 Network Integration Transmission Service:**

The transmission service provided under Part III of the Tariff.

**1.60 Network Load:**

The load that a Network Customer designates for Network Integration Transmission Service under Part III of the Tariff. The Network Customer's Network Load shall include all load served by the output of any Network Resources designated by the Network Customer. A Network Customer may elect to designate less than its total load as Network Load but may not designate only part of the load at a discrete Point of Delivery. Where a Eligible Customer has elected not to designate a particular load at discrete points of delivery as Network Load, the Eligible Customer is responsible for making separate arrangements under Part II of the Tariff for any



Point-To-Point Transmission Service that may be necessary for such non-designated load.

**1.61 Network Operating Agreement:**

An executed agreement that contains the terms and conditions under which the Network Customer shall operate its facilities and the technical and operational matters associated with the implementation of Network Integration Transmission Service under Part III of the Tariff.

**1.62 Network Operating Committee:**

A group made up of representatives from the Network Customer(s) and the Transmission Provider established to coordinate operating criteria and other technical considerations required for implementation of Network Integration Transmission Service under Part III of this Tariff.

**1.63 Network Resource:**

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 of one year or more to third parties or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program or output associated with a Dispatch Instruction.

**1.64 Network Upgrades:**

Modifications or additions to transmission-related facilities that are integrated with and support the Transmission Provider's overall Transmission System for the general benefit of all users of such Transmission System.

**1.65 Non-Firm Point-To-Point Transmission Service:**

Point-To-Point Transmission Service under the Tariff that is reserved and scheduled on an as-available basis and is subject to Curtailment or Interruption as set forth in Section 14.7 under Part II of this Tariff. Non-Firm Point-To-Point Transmission Service is available on a stand-alone basis for periods ranging from one hour to one month.

**1.66 Non-Firm Sale: (Intentionally omitted.)****1.67 Non-Participating Resource:**

A resource in BPA's BAA that is not a BPA EIM Participating Resource.

**1.68 Open Access Same-Time Information System (OASIS):**

The information system and standards of conduct contained in Part 37 of the Commission's regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS.

**1.69 Operating Hour:**

The hour during the day when the EIM runs and energy is supplied to load.

**1.70 Part I:**

Tariff Definitions and Common Service Provisions contained in Sections 2 through 12.

**1.71 Part II:**

Tariff Sections 13 through 27 pertaining to Point-To-Point Transmission Service in conjunction with the applicable Common Service Provisions of Part I and appropriate Schedules and Attachments.

**1.72 Part III:**

Tariff Sections 28 through 35 pertaining to Network Integration Transmission Service in conjunction with the applicable Common Service Provisions of Part I and appropriate Schedules and Attachments.

**1.73 Part IV:**

Tariff Section 36 in conjunction with applicable provisions of Parts I, II, and III and appropriate Schedules and Attachments.

**1.74 Parties:**

The Transmission Provider and the Transmission Customer receiving service under the Tariff.

**1.75 Point(s) of Delivery:**

Point(s) on the Transmission Provider's Transmission System, or points on other utility systems, where capacity and energy transmitted by the Transmission Provider will be made available to the Receiving Party under Parts II and III of the Tariff.

The Point(s) of Delivery shall be specified in the Service Agreement for Long-Term Firm Point-To-Point and Network Integration Transmission Service.

**1.76 Point(s) of Receipt:**

Point(s) of interconnection on the Transmission Provider's Transmission System where capacity and energy will be made available to the Transmission Provider by the Delivering Party under Parts II and III of the Tariff. The Point(s) of Receipt shall be specified in the Service Agreement for Long-Term Firm Point-To-Point and Network Integration Transmission Service.

**1.77 Point-To-Point Transmission Service:**

The reservation and transmission of capacity and energy on either a firm or non-firm basis from the Point(s) of Receipt to the Point(s) of Delivery under Part II of the Tariff.

**1.78 Power Purchaser:**

The entity that is purchasing the capacity and energy to be transmitted under the Tariff.

**1.79 Precedent Transmission Service Agreement:**

An agreement under which an Eligible Customer that has submitted a transmission service request agrees to take and pay for the transmission service requested if the Transmission Provider satisfies conditions identified in the agreement.

**1.80 Pre-Confirmed Application:**

An Application that commits the Eligible Customer to execute a Service Agreement upon receipt of notification that the Transmission Provider can provide the requested Transmission Service.

**1.81 Pricing Node (PNode):**

Refer to the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

**1.82 Receiving Party:**

The entity receiving the capacity and energy transmitted by the Transmission Provider to Point(s) of Delivery.

**1.83 Regional Transmission Group (RTG):**

A voluntary organization of transmission owners, transmission users and other entities approved by the Commission to efficiently coordinate transmission planning (and expansion), operation and use on a regional (and interregional) basis.

**1.84 Reserved Capacity:**

The maximum amount of capacity and energy that the Transmission Provider agrees to transmit for the Transmission Customer over the Transmission Provider's Transmission System between the Point(s) of Receipt and the Point(s) of Delivery under Part II of the Tariff. Reserved Capacity shall be expressed in terms of whole megawatts on a sixty (60) minute interval (commencing on the clock hour) basis.

**1.85 Resource Plan:**

The combination of load, resource and Interchange components of the Transmission Customer Base Schedule, ancillary services plans of the BPA EIM Entity, bid ranges submitted by BPA EIM Participating Resources, and the EIM Available Balancing Capacity of Balancing Authority Area Resources.

**1.86 Service Agreement:**

The initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the Transmission Provider for service under the Tariff.

**1.87 Service Commencement Date:**

The date the Transmission Provider begins to provide service pursuant to the terms of an executed Service Agreement, or the date the Transmission Provider begins to provide service in accordance with Section 15.3 or Section 29.1 under the Tariff.

**1.88 Short-Term Firm Point-To-Point Transmission Service:**

Firm Point-To-Point Transmission Service under Part II of the Tariff with a term of less than one year. Short Term Firm Point-To-Point Transmission Service of duration of one calendar day or less is sometimes referred to as Hourly Firm Point-To-Point Transmission Service.

**1.89 System Condition:**

A specified condition on the Transmission Provider's system or on a neighboring system, such as a constrained transmission element or flowgate, that may trigger Curtailment of Long-Term Firm Point-To-Point Transmission Service using the curtailment priority pursuant to Section 13.6. Such conditions must be identified in the Transmission Customer's Service Agreement.

**1.90 System Impact Study:**

An assessment by the Transmission Provider of (i) the adequacy of the Transmission System to accommodate a request for either Firm Point-To-Point Transmission Service or Network Integration Transmission Service and (ii) whether any additional costs may be incurred in order to provide transmission service.

**1.91 Third-Party Sale:**

Any sale for resale in interstate commerce to a Power Purchaser that is not designated as part of Network Load under the Network Integration Transmission Service.

**1.92 Transmission Customer:**

Any Eligible Customer (or its Designated Agent) that (i) executes a Service Agreement, or (ii) requests to initiate service in the absence of an executed service agreement under Part II of the Tariff. This term is used in the Part I Common

Service Provisions to include customers receiving transmission service under Part II and Part III of this Tariff.

**1.93 Transmission Customer Base Schedule:**

An energy schedule that provides Transmission Customer hourly-level Forecast Data and other information that is used by the BPA EIM Entity as the baseline by which to measure Imbalance Energy for purposes of EIM settlement. The term “Transmission Customer Base Schedule” as used in this Tariff may refer collectively to the components of such schedule (resource, Interchange, Intrachange, and load determined pursuant to Section 4.2.4.3 of Attachment Q) or any individual components of such schedule.

**1.94 Transmission Provider:**

The Bonneville Power Administration, which owns, controls, or operates facilities used for the transmission of electric energy in interstate commerce and provides transmission service under the Tariff.

**1.95 Transmission Provider's Monthly Transmission System Peak:  
(Intentionally omitted.)**

**1.96 Transmission Service:**

Point-To-Point Transmission Service provided under Part II of the Tariff on a firm and non-firm basis.

**1.97 Transmission System:**

The facilities owned, controlled or operated by the Transmission Provider that are used to provide transmission service under Part II and Part III of the Tariff.

**1.98 Uninstructed Imbalance Energy (UIE):**

For Non-Participating Resources in the BPA Entity BAA, UIE is a type of Imbalance Energy that occurs when there are deviations between either (1) the resource's 5-minute meter data and the resource component of the Transmission Customer Base Schedule, or, if applicable, (2) the resource's 5 minute meter data and the resource's scheduled output that is communicated by the BPA EIM Entity to the MO and incorporated by the MO into an EIM market run as described in the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

For Transmission Customers with load in the BPA BAA, UIE is a type of Imbalance Energy that occurs when there are deviations between the Transmission Customer's actual hourly load and the Transmission Customer Base Schedule as described in the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

**1.99 Variable Energy Resource:**

A Variable Energy Resource is an electric generating facility that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator. This does not include, for example, hydroelectric, geothermal, biomass, or process steam generating facilities.



## **2 Initial Allocation and Renewal Procedures**

### **2.1 Initial Allocation of Available Transfer Capability: (Intentionally omitted.)**

### **2.2 Reservation Priority For Existing Firm Service Customers:**

Existing firm service customers (wholesale requirements and transmission-only, with a requested contract term of five years or more other than customers that have signed a Precedent Transmission Service Agreement under Sections 19.10 or 32.6), have the right to continue to take transmission service from the Transmission Provider when the contract expires, rolls over or is renewed. Existing firm service customers whose Service Agreement includes service requested under a Precedent Transmission Service Agreement with a contract term of five years or more for the service requested under a Precedent Transmission Service Agreement, have the right to continue to take transmission service from the Transmission Provider when such contract expires, rolls over or is renewed. This transmission reservation priority is independent of whether the existing customer continues to purchase capacity and energy from the Transmission Provider or elects to purchase capacity and energy from another supplier. If at the end of the contract term, the Transmission Provider's Transmission System cannot accommodate all of the requests for transmission service, the existing firm service customer must agree to accept a contract term at least equal to a competing request by any new Eligible Customer and to pay the current rate, as determined pursuant to Section 7 of the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act), for such service; provided that, the firm service customer shall have a right of first refusal at the end of such service only if the new contract is for five years or more. The

existing firm service customer must provide notice to the Transmission Provider whether it will exercise its right of first refusal no less than one year prior to the expiration date of its transmission service agreement. This transmission reservation priority for existing firm service customers is an ongoing right that may be exercised at the end of all firm contract terms of five years or longer.

### **3 Ancillary Services**

Ancillary Services are needed with transmission service to maintain reliability within and among the Control Areas affected by the transmission service. The Transmission Provider is required to provide (or offer to arrange with the local Control Area operator as discussed below), and the Transmission Customer is required to purchase, the following Ancillary Services (i) Scheduling, System Control and Dispatch, and (ii) Reactive Supply and Voltage Control from Generation or Other Sources.

The Transmission Provider is required to offer to provide (or offer to arrange with the local Control Area operator as discussed below) the following Ancillary Services only to the Transmission Customer serving load within the Transmission Provider's Control Area (i) Regulation and Frequency Response, (ii) Energy Imbalance, (iii) Operating Reserve - Spinning, and (iv) Operating Reserve - Supplemental. The Transmission Customer serving load within the Transmission Provider's Control Area is required to acquire these Ancillary Services, whether from the Transmission Provider, from a third party, or by self-supply.

The Transmission Provider is required to provide (or offer to arrange with the local Control Area Operator as discussed below), to the extent it is physically feasible to do so from its resources or from resources available to it, Generator Imbalance Service when Transmission Service is used to deliver energy from a generator located within its

Control Area. The Transmission Customer using Transmission Service to deliver energy from a generator located within the Transmission Provider's Control Area is required to acquire Generator Imbalance Service, whether from the Transmission Provider, from a third party, or by self-supply.

The Transmission Customer may not decline the Transmission Provider's offer of Ancillary Services unless it demonstrates that it has acquired the Ancillary Services from another source. The Transmission Customer must list in its Application which Ancillary Services it will purchase from the Transmission Provider. A Transmission Customer that exceeds its firm reserved capacity at any Point of Receipt or Point of Delivery or an Eligible Customer that uses Transmission Service at a Point of Receipt or Point of Delivery that it has not reserved is required to pay for all of the Ancillary Services identified in this section that were provided by the Transmission Provider associated with the unreserved service. The Transmission Customer or Eligible Customer will pay for Ancillary Services based on the amount of transmission service it used but did not reserve.

If the Transmission Provider is a public utility providing transmission service but is not a Control Area operator, it may be unable to provide some or all of the Ancillary Services. In this case, the Transmission Provider can fulfill its obligation to provide Ancillary Services by acting as the Transmission Customer's agent to secure these Ancillary Services from the Control Area operator. The Transmission Customer may elect to (i) have the Transmission Provider act as its agent, (ii) secure the Ancillary Services directly from the Control Area operator, or (iii) secure the Ancillary Services

(discussed in Schedules 3, 4, 5, 6, 9 and 10) from a third party or by self-supply when technically feasible.

The Transmission Provider shall specify the rate treatment and all related terms and conditions in the event of an unauthorized use of Ancillary Services by the Transmission Customer.

The specific Ancillary Services, prices and/or compensation methods are described on the Schedules that are attached to and made a part of the Tariff. Three principal requirements apply to discounts for Ancillary Services provided by the Transmission Provider in conjunction with its provision of transmission service as follows: (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. A discount agreed upon for an Ancillary Service must be offered for the same period to all Eligible Customers on the Transmission Provider's system. Sections 3.1 through 3.8 below list the Ancillary Services.

**3.1 Scheduling, System Control and Dispatch Service:**

The rates and/or methodology are described in Schedule 1.

**3.2 Reactive Supply and Voltage Control from Generation or Other Sources Service:**

The rates and/or methodology are described in Schedule 2.

**3.3 Regulation and Frequency Response Service:**

Where applicable the rates and/or methodology are described in Schedule 3.

**3.4 Energy Imbalance Service:**

Where applicable the rates and/or methodology are described in Schedule 4 or Schedule 4E.

**3.5 Operating Reserve – Spinning Reserve Service:**

Where applicable the rates and/or methodology are described in Schedule 5.

**3.6 Operating Reserve – Supplemental Reserve Service:**

Where applicable the rates and/or methodology are described in Schedule 6.

**3.7 Generator Imbalance Service:**

Where applicable the rates and/or methodology are described in Schedule 9 or Schedule 9E.

**3.8 Capacity for Generator Imbalance Service:**

Where applicable the rates and/or methodology are described in Schedule 10.

**4 Open Access Same-Time Information System (OASIS)**

Terms and conditions regarding Open Access Same-Time Information System and standards of conduct are set forth in 18 C.F.R § 37 of the Commission's regulations (Open Access Same-Time Information System and Standards of Conduct for Public Utilities) and 18 C.F.R. § 38 of the Commission's regulations (Business Practice Standards and Communication Protocols for Public Utilities). Notwithstanding these terms and conditions regarding the Open Access Same-Time Information System and Standards of Conduct, the Transmission Provider calculates Available Transfer Capability (ATC) and the Total Transfer Capability (TTC) of the Transmission Provider's system only for ATC paths as defined in Attachment C. In the event available transfer capability as posted on the OASIS is insufficient to accommodate a request for

firm transmission service, additional studies may be required as provided by this Tariff pursuant to Sections 19 and 32.

The Transmission Provider shall post on OASIS and its public website an electronic link to all rules, standards and practices that (i) relate to the terms and conditions of transmission service, (ii) are not subject to a North American Energy Standards Board (NAESB) copyright restriction, and (iii) are not otherwise included in this Tariff. The Transmission Provider shall post on OASIS and on its public website an electronic link to the NAESB website where any rules, standards and practices that are protected by copyright may be obtained. The Transmission Provider shall also post on OASIS and its public website an electronic link to a statement of the process by which the Transmission Provider shall add, delete or otherwise modify the rules, standards and practices that are not included in this tariff. Such process shall set forth the means by which the Transmission Provider shall provide reasonable advance notice to Transmission Customers and Eligible Customers of any such additions, deletions or modifications, the associated effective date, and any additional implementation procedures that the Transmission Provider deems appropriate.

## **5 Local Furnishing Bonds (Intentionally omitted.)**

### **5.1 Transmission Providers That Own Facilities Financed by Local Furnishing Bonds: (Intentionally omitted.)**

### **5.2 Alternative Procedures for Requesting Transmission Service: (Intentionally omitted.)**

## **6 Reciprocity**

A Transmission Customer receiving transmission service under this Tariff agrees to provide comparable transmission service that it is capable of providing to the Transmission Provider on similar terms and conditions over facilities used for the

transmission of electric energy owned, controlled or operated by the Transmission Customer and over facilities used for the transmission of electric energy owned, controlled or operated by the Transmission Customer's corporate Affiliates. A Transmission Customer that is a member of, or takes transmission service from, a power pool, Regional Transmission Group, Regional Transmission Organization (RTO), Independent System Operator (ISO) or other transmission organization approved by the Commission for the operation of transmission facilities also agrees to provide comparable transmission service to the transmission-owning members of such power pool and Regional Transmission Group, RTO, ISO or other transmission organization on similar terms and conditions over facilities used for the transmission of electric energy owned, controlled or operated by the Transmission Customer and over facilities used for the transmission of electric energy owned, controlled or operated by the Transmission Customer's corporate Affiliates.

This reciprocity requirement applies not only to the Transmission Customer that obtains transmission service under the Tariff, but also to all parties to a transaction that involves the use of transmission service under the Tariff, including the power seller, buyer and any intermediary, such as a power marketer. This reciprocity requirement also applies to any Eligible Customer that owns, controls or operates transmission facilities that uses an intermediary, such as a power marketer, to request transmission service under the Tariff. If the Transmission Customer does not own, control or operate transmission facilities, it must include in its Application a sworn statement of one of its duly authorized officers or other representatives that the purpose of its Application is not to assist an Eligible Customer to avoid the requirements of this provision.

## **7 Billing and Payment**

### **7.1 Billing Procedure:**

Within a reasonable time after service is provided, the Transmission Provider shall submit an invoice to the Transmission Customer for the charges for all services furnished under the Tariff. The Transmission Provider may submit invoices for periods of less than a full month. The invoice shall be paid by the Transmission Customer within twenty (20) days of receipt. All payments shall be made in immediately available funds payable to the Transmission Provider, or by wire transfer to a bank named by the Transmission Provider.

### **7.2 Interest on Unpaid Balances:**

Interest on any unpaid amounts (including amounts placed in escrow) shall be calculated in accordance with the methodology specified for interest on refunds in the Commission's regulations at 18 C.F.R. 35.19a(a)(2)(iii). Interest on delinquent amounts shall be calculated from the due date of the bill to the date of payment.

When payments are made by mail, bills shall be considered as having been paid on the date of receipt by the Transmission Provider.

### **7.3 Customer Default:**

In the event the Transmission Customer fails, for any reason other than a billing dispute as described below, to make payment to the Transmission Provider on or before the due date as described above, and such failure of payment is not corrected within thirty (30) calendar days after the Transmission Provider notifies the Transmission Customer to cure such failure, a default by the Transmission Customer shall be deemed to exist. Upon the occurrence of a default, the Transmission Provider may notify the Transmission Customer that it plans to terminate services in



sixty (60) days. The Transmission Customer may use the dispute resolution procedures to contest such termination. In the event of a billing dispute between the Transmission Provider and the Transmission Customer, the Transmission Provider will continue to provide service under the Service Agreement as long as the Transmission Customer (i) continues to make all payments not in dispute, and (ii) pays into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If the Transmission Customer fails to meet these two requirements for continuation of service, then the Transmission Provider may provide notice to the Transmission Customer of its intention to suspend service in sixty (60) days.

## **8 Accounting for the Transmission Provider's Use of the Tariff**

The Transmission Provider shall record the following amounts, as outlined below.

### **8.1 Transmission Revenues:**

Include in a separate operating revenue account or subaccount the revenues it receives from Transmission Service when making Third-Party Sales under Part II of the Tariff.

### **8.2 Study Costs and Revenues:**

Include in a separate transmission operating expense account or subaccount, costs properly chargeable to expense that are incurred to perform any System Impact Studies or Facilities Studies which the Transmission Provider conducts to determine if it must construct new transmission facilities or upgrades necessary for its own uses, including making Third-Party Sales under the Tariff; and include in a separate operating revenue account or subaccount the revenues received for System Impact

Studies or Facilities Studies performed when such amounts are separately stated and identified in the Transmission Customer's billing under the Tariff.

## **9 Tariff and Rate Modifications**

### **(a) Tariff Modifications**

(1) Subject to applicable law, Bonneville commits to open access transmission service. Bonneville shall follow the statutory procedures in Section 212(i)(2)(A) of the Federal Power Act to set generally applicable terms and conditions in its Tariff and will make a final determination to adopt transmission service terms and conditions in a record of decision. In the record of decision, the Administrator's determination will set forth the reasons for reaching any findings and conclusions, including conclusions that may differ from those of the hearing officer, based on:

- (a) The hearing record,
- (b) Consideration of the hearing officer's recommendation,
- (c) Bonneville's organic statutes and other laws that apply to Bonneville, and
- (d) Consideration of the standards that apply to Commission-ordered Bonneville transmission service under Sections 211 and 212 of the Federal Power Act.

(2) The Administrator has the right to change the terms and conditions, classification of service, or schedules and attachments contained in the Tariff only if the Administrator conducts a proceeding regarding the change in accordance with Section 212(i)(2)(A) of the Federal Power Act and makes a final determination in that proceeding in accordance with section 9(a)(1) above to adopt such change. Any

newly proposed transmission tariff of general applicability is considered and treated as a proposed change to the Tariff under this section.

(b) Rate Modifications

The Transmission Provider may change the rates that apply to transmission service pursuant to applicable law.

(c) Nothing contained in the Tariff or any Service Agreement shall be construed as affecting in any way the ability of any Party receiving service under the Tariff to exercise its rights under applicable law.

## **10 Force Majeure and Indemnification**

### **10.1 Force Majeure:**

An event of Force Majeure means 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 Curtailment, order, regulation or restriction imposed by governmental military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include an act of negligence or intentional wrongdoing. Neither the Transmission Provider nor the Transmission Customer will be considered in default as to any obligation under this Tariff if prevented from fulfilling the obligation due to an event of Force Majeure. However, a Party whose performance under this Tariff is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Tariff.

### **10.2 Indemnification:**

(a) The Transmission Customer shall at all times indemnify, defend, and save the Transmission Provider harmless from, any and all damages,

losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the Transmission Provider's performance of its obligations under this Tariff on behalf of the Transmission Customer, except in cases of negligence or intentional wrongdoing by the Transmission Provider. Provided, however, that the standard of liability for the actions of the BPA EIM Entity performed consistent with Attachment Q of this Tariff shall be gross negligence or intentional wrongdoing.

- (b) If the Transmission Provider and the Transmission Customer are Parties to the Agreement Limiting Liability Among Western Interconnected Systems, such agreement shall continue in full force and effect as between the Parties.

## **11 Creditworthiness**

The Transmission Provider will specify its Creditworthiness procedures in Attachment M.

## **12 Dispute Resolution Procedures**

### **12.1 Internal Dispute Resolution Procedures:**

Any dispute between a Transmission Customer and the Transmission Provider involving transmission service under the Tariff (excluding rate changes) shall be referred to a designated senior representative of the Transmission Provider and a senior representative of the Transmission Customer for resolution on an informal basis as promptly as practicable. In the event the designated representatives are

unable to resolve the dispute within thirty (30) days [or such other period as the Parties may agree upon], such dispute may be submitted to a court or agency of competent jurisdiction or, by mutual agreement, arbitration and resolved in accordance with the arbitration procedures set forth below.

### **12.2 External Arbitration Procedures:**

Any arbitration initiated under the Tariff 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) days of the referral of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) 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 generally conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association and any applicable Commission regulations or Regional Transmission Group rules.

### **12.3 Arbitration Decisions:**

Unless otherwise agreed, the arbitrator(s) shall render a decision within ninety (90) days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the Tariff and any Service Agreement entered into under the Tariff and shall have no power to modify or change any of the above 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 and/or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with the Commission if it affects jurisdictional rates, terms and conditions of service or facilities.

#### **12.4 EIM Disputes:**

##### **12.4.1 Disputes between the BPA EIM Entity and a Transmission Customer or GI Customer Related to Allocation of Charges or Payments from the MO:**

To the extent a dispute arises between the BPA EIM Entity and a Transmission Customer or GI Customer regarding the BPA EIM Entity's implementation of this Tariff's provisions regarding the manner in which the BPA EIM Entity allocates charges or payments from the MO, the parties shall follow the dispute resolution procedures in Sections 12.1 to 12.3 of this Tariff.

##### **12.4.2 Disputes between the MO and BPA EIM Participating Resource Scheduling Coordinators Related to EIM Charges and Payments Directly from the MO:**

Disputes involving settlement statements between the MO and BPA EIM Participating Resource Scheduling Coordinators shall be resolved in accordance with the dispute resolution process of the MO Tariff. A Transmission Customer with a BPA EIM Participating Resource shall provide notice to the BPA EIM Entity if it raises a dispute with the MO, and such notice shall be provided in accordance with the process set forth in the BPA EIM BP.

**12.4.3 Disputes between the MO and the BPA EIM Entity:**

The BPA EIM Entity may raise disputes with the MO regarding the settlement statements it receives from the MO in accordance with the process specified in the MO Tariff. If the BPA EIM Entity submits a dispute it shall provide notice to Transmission Customers in accordance with the BPA EIM BP.

**12.4.4 Disputes Regarding MO Charges or Payments to the BPA EIM Entity Raised by Transmission Customers or GI Customers:**

To the extent a dispute arises regarding a MO charge or a MO payment to the BPA EIM Entity that is subsequently charged or paid by the BPA EIM Entity to a Transmission Customer or a GI Customer, and such Transmission Customer or GI Customer wishes to raise a dispute with the MO, the BPA EIM Entity shall file a dispute on behalf of such Transmission Customer or GI Customer in accordance with the MO Tariff and work with the Transmission Customer or the GI Customer to resolve the dispute pursuant to the process specified in the MO Tariff.

**12.5 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.

**12.6 Rights Under Applicable Law:**

Nothing in this section shall restrict the ability of any party to exercise its rights under applicable law.

## **II. POINT-TO-POINT TRANSMISSION SERVICE**

### **Preamble**

The Transmission Provider will provide Firm and Non-Firm Point-To-Point Transmission Service pursuant to the applicable terms and conditions of this Tariff. Point-To-Point Transmission Service is for the receipt of capacity and energy at designated Point(s) of Receipt and the transfer of such capacity and energy to designated Point(s) of Delivery. If and to the extent that the Transmission Provider has established separate rates for Transmission Service over one or more segments, separate rates shall be charged for Transmission Service over such separate segments.

### **13 Nature of Firm Point-To-Point Transmission Service**

#### **13.1 Term:**

The minimum term of Firm Point-To-Point Transmission Service shall be one hour and the maximum term shall be specified in the Service Agreement.

#### **13.2 Reservation Priority:**

- (i) Long-Term Firm Point-To-Point Transmission Service shall be available on a first-come, first-served basis, i.e., in the chronological sequence in which each Transmission Customer has requested service.
- (ii) Reservations for Short-Term Firm Point-To-Point Transmission Service will be conditional based upon the length of the requested transaction or reservation. However, Pre-Confirmed Applications for Short-Term Point-to-Point Transmission Service will receive priority over earlier-submitted requests that are not Pre-Confirmed and that have equal or shorter duration. Among requests or reservations with the same duration and, as relevant, pre-confirmation status (pre-confirmed, confirmed, or



not confirmed), priority will be given to an Eligible Customer's request or reservation that offers the highest price, followed by the date and time of the request or reservation.

- (iii) If the Transmission Provider's business practices establish an earliest time when requests for Short-Term Firm Point-To-Point Transmission Service may be submitted, any requests for such service submitted within five minutes after that time shall be deemed to have been submitted simultaneously. Among such requests with the same priority based on duration, pre-confirmation status and price, priority will be based on a random lottery. The Transmission Provider shall post on its OASIS the allocation methodology and associated business practices.
- (iv) If the Transmission System becomes oversubscribed, requests for service may preempt competing reservations up to the following conditional reservation deadlines: at 12:00 p.m. of the preschedule for the day of delivery for the hourly service; one preschedule day before the commencement of daily service; one week before the commencement of weekly service; and one month before the commencement of monthly service. Before the conditional reservation deadline, if available transfer capability is insufficient to satisfy all requests and reservations, an Eligible Customer with a reservation for shorter term service or equal duration service and lower price has the right of first refusal to match any longer term request or equal duration service with a higher price before losing its reservation priority. A longer term competing request

for Short-Term Firm Point-To-Point Transmission Service will be granted if the Eligible Customer with the right of first refusal does not agree to match the competing request within 24 hours (or earlier if necessary to comply with the scheduling deadlines provided in Section 13.8) from being notified by the Transmission Provider of a longer-term competing request for Short-Term Firm Point-To-Point Transmission Service. When a longer duration request preempts multiple shorter duration reservations, the shorter duration reservations shall have simultaneous opportunities to exercise the right of first refusal. Duration, price and time of response will be used to determine the order by which the multiple shorter duration reservations will be able to exercise the right of first refusal. After the conditional reservation deadline, service will commence pursuant to the terms of Part II of the Tariff.

- (v) Firm Point-To-Point Transmission Service will always have a reservation priority over Non-Firm Point-To-Point Transmission Service under the Tariff. All Long-Term Firm Point-To-Point Transmission Service will have equal reservation priority with Native Load Customers and Network Customers. Reservation priorities for existing firm service customers are provided in Section 2.2.

### **13.3 Use of Firm Transmission Service by the Transmission Provider:**

The Transmission Provider will be subject to the rates, terms and conditions of Part II of the Tariff when making Third-Party Sales under agreements executed on or after October 1, 2019. The Transmission Provider will maintain separate accounting,

pursuant to Section 8, for any use of the Point-To-Point Transmission Service to make Third-Party Sales.

#### **13.4 Service Agreements:**

The Transmission Provider shall offer a standard form Point-To-Point Transmission Service Agreement (Attachment A) to an Eligible Customer when it submits a Completed Application for Long-Term Firm Point-To-Point Transmission Service.

The Transmission Provider shall offer a standard form Point-To-Point Transmission Service Agreement (Attachment A) to an Eligible Customer when it first submits a Completed Application for Short-Term Firm Point-To-Point Transmission Service pursuant to the Tariff. An Eligible Customer that uses the Transmission Service at a Point of Receipt or Point of Delivery that it has not reserved and that has not executed a Service Agreement will be deemed, for purposes of assessing any appropriate charges and penalties, to have executed the appropriate Service Agreement. The Service Agreement shall, when applicable, specify any conditional curtailment options selected by the Transmission Customer. Where the Service Agreement contains conditional curtailment options and is subject to a biennial reassessment as described in Section 15.4, the Transmission Provider shall provide the Transmission Customer notice of any changes to the curtailment conditions no less than 90 days prior to the date for imposition of new curtailment conditions. Concurrent with such notice, the Transmission Provider shall provide the Transmission Customer with the reassessment study and a narrative description of the study, including the reasons for changes to the number of hours per year or System Conditions under which conditional curtailment may occur.

**13.5 Transmission Customer Obligations for Facility Additions or Redispatch Costs:**

Except with respect to the Northwest AC Intertie and Pacific DC Intertie, in cases where the Transmission Provider determines that the Transmission System is not capable of providing Firm Point-To-Point Transmission Service without (1) degrading or impairing the reliability of service to Native Load Customers, Network Customers and other Transmission Customers taking Firm Point-To-Point Transmission Service, or (2) interfering with the Transmission Provider's ability to meet prior firm contractual commitments to others, the Transmission Provider will be obligated to expand or upgrade its Transmission System pursuant to the terms of Section 15.4. The Transmission Customer must agree to compensate the Transmission Provider for any necessary transmission facility additions pursuant to the terms of Section 27. To the extent the Transmission Provider can relieve any system constraint by redispatching the Transmission Provider's resources, it shall do so, provided that the Eligible Customer agrees to compensate the Transmission Provider pursuant to the terms of Section 27 and agrees to either (i) compensate the Transmission Provider for any necessary transmission facility additions or (ii) accept the service subject to a biennial reassessment by the Transmission Provider of redispatch requirements as described in Section 15.4. Any redispatch, Network Upgrade or Direct Assignment Facilities costs to be charged to the Transmission Customer on an incremental basis under the Tariff will be specified in the Service Agreement prior to initiating service.

**13.6 Curtailment of Firm Transmission Service:**

In the event that a Curtailment on the Transmission Provider's Transmission System, or a portion thereof, is required to maintain reliable operation of such system and the system directly and indirectly interconnected with Transmission Provider's Transmission System, Curtailments will be made on a non-discriminatory basis to the transaction(s) that effectively relieve the constraint. The Transmission Provider may elect to implement such Curtailments pursuant to the Procedures Addressing Parallel Flows specified in Attachment J. If multiple transactions require Curtailment, to the extent practicable and consistent with Good Utility Practice, the Transmission Provider will curtail service to Network Customers and Transmission Customers taking Firm Point-To-Point Transmission Service on a basis comparable to the curtailment of service to the Transmission Provider's Native Load Customers. All Curtailments will be made on a non-discriminatory basis, however, Non-Firm Point-To-Point Transmission Service shall be subordinate to Firm Transmission Service. Long-Term Firm Point-To-Point Service subject to conditions described in Section 15.4 shall be curtailed with secondary service in cases where the conditions apply, but otherwise will be curtailed on a pro rata basis with other Firm Transmission Service. When the Transmission Provider determines that an electrical emergency exists on its Transmission System and implements emergency procedures to Curtail Firm Transmission Service, the Transmission Customer shall make the required reductions upon request of the Transmission Provider. However, the Transmission Provider reserves the right to Curtail, in whole or in part, any Firm Transmission Service provided under the Tariff when, in the Transmission Provider's sole discretion, an emergency or other unforeseen condition impairs or

degrades the reliability of its Transmission System. The Transmission Provider will notify all affected Transmission Customers in a timely manner of any scheduled Curtailments. Transmission Provider shall take necessary measures to ensure reliability in BPA's BAA in accordance with Section 6 of Attachment Q.

**13.7 Classification of Firm Transmission Service:**

- (a) The Transmission Customer taking Firm Point-To-Point Transmission Service may (1) change its Receipt and Delivery Points to obtain service on a non-firm basis consistent with the terms of Section 22.1 or (2) request a modification of the Points of Receipt or Delivery on a firm basis pursuant to the terms of Section 22.2.
- (b) The Transmission Customer may purchase transmission service to make sales of capacity and energy from multiple generating units that are on the Transmission Provider's Transmission System. For such a purchase of transmission service, the resources will be designated as multiple Points of Receipt, unless the multiple generating units are at the same generating plant in which case the units would be treated as a single Point of Receipt.
- (c) The Transmission Provider shall provide firm deliveries of capacity and energy from the Point(s) of Receipt to the Point(s) of Delivery. Each Point of Receipt at which firm transmission capacity is reserved by the Transmission Customer shall be set forth in the Firm Point-To-Point Service Agreement for Long-Term Firm Transmission Service along with a corresponding capacity reservation associated with each Point of Receipt. Points of Receipt and corresponding capacity reservations shall

be as mutually agreed upon by the Parties for Short-Term Firm Transmission. Each Point of Delivery at which firm transfer capability is reserved by the Transmission Customer shall be set forth in the Firm Point-To-Point Service Agreement for Long-Term Firm Transmission Service along with a corresponding capacity reservation associated with each Point of Delivery. Points of Delivery and corresponding capacity reservations shall be as mutually agreed upon by the Parties for Short-Term Firm Transmission. The greater of either (1) the sum of the capacity reservations at the Point(s) of Receipt, or (2) the sum of the capacity reservations at the Point(s) of Delivery shall be the Transmission Customer's Reserved Capacity. The Transmission Customer will be billed for its Reserved Capacity under the terms of Schedule 7. The Transmission Customer may not exceed its firm capacity reserved at each Point of Receipt and each Point of Delivery except as otherwise specified in Section 22. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that a Transmission Customer (including Third-Party Sales by the Transmission Provider) exceeds its firm reserved capacity at any Point of Receipt or Point of Delivery or uses Transmission Service at a Point of Receipt or Point of Delivery that it has not reserved.

### **13.8 Scheduling of Firm Point-To-Point Transmission Service:**

Schedules for the Transmission Customer's Firm Point-To-Point Transmission

Service must be submitted to the Transmission Provider no later than 10:00 a.m. [or

a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] of the day prior to commencement of such service. Schedules submitted after 10:00 a.m. will be accommodated, if practicable. Hourly Firm Point-To-Point Service can be requested on the day of delivery up to twenty (20) minutes prior to the hour of delivery until December 31, 2019. Starting January 1, 2020, Hourly Firm Point-To-Point Service can be requested up to twenty (20) minutes prior to the end of the day before the operating day. Hour-to-hour and intra-hour (four intervals consisting of fifteen minute schedules) schedules of any capacity and energy that is to be delivered must be stated in increments of 1,000 kW per hour [or a reasonable increment that is generally accepted in the region and is consistently adhered to by the Transmission Provider]. Transmission Customers within the Transmission Provider's service area with multiple requests for Transmission Service at a Point of Receipt, each of which is under 1,000 kW per hour, may consolidate their service requests at a common point of receipt into units of 1,000 kW per hour for scheduling and billing purposes. Scheduling changes will be permitted up to twenty (20) minutes [or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] before the start of the next scheduling interval provided that the Delivering Party and Receiving Party also agree to the schedule modification. The Transmission Provider will furnish to the Delivering Party's system operator, hour-to-hour and intra-hour schedules equal to those furnished by the Receiving Party (unless reduced for losses) and shall deliver the capacity and energy provided by such schedules. Should the Transmission Customer, Delivering Party or Receiving Party revise or terminate any schedule,



such party shall immediately notify the Transmission Provider, and the Transmission Provider shall have the right to adjust accordingly the schedule for capacity and energy to be received and to be delivered.

#### **14 Nature of Non-Firm Point-To-Point Transmission Service**

##### **14.1 Term:**

Non-Firm Point-To-Point Transmission Service will be available for periods ranging from one (1) hour to one (1) month. However, a Purchaser of Non-Firm Point-To-Point Transmission Service will be entitled to reserve a sequential term of service (such as a sequential monthly term without having to wait for the initial term to expire before requesting another monthly term) so that the total time period for which the reservation applies is greater than one month, subject to the requirements of Section 18.3.

##### **14.2 Reservation Priority:**

Non-Firm Point-To-Point Transmission Service shall be available from transfer capability in excess of that needed for reliable service to Native Load Customers, Network Customers and other Transmission Customers taking Long-Term and Short-Term Firm Point-To-Point Transmission Service. A higher priority will be assigned first to requests or reservations with a longer duration of service and second to Pre-Confirmed Applications. In the event the Transmission System is constrained, competing requests of the same Pre-Confirmation status and equal duration will be prioritized based on the highest price offered by the Eligible Customer for the Transmission Service. Eligible Customers that have already reserved shorter term service have the right of first refusal to match any longer term request before being preempted. A longer term competing request for Non-Firm Point-To-Point

Transmission Service will be granted if the Eligible Customer with the right of first refusal does not agree to match the competing request: (a) immediately for hourly Non-Firm Point-To-Point Transmission Service after notification by the Transmission Provider; and, (b) within 24 hours (or earlier if necessary to comply with the scheduling deadlines provided in Section 14.6) for Non-Firm Point-To-Point Transmission Service other than hourly transactions after notification by the Transmission Provider. Transmission service for Network Customers from resources other than designated Network Resources will have a higher priority than any Non-Firm Point-To-Point Transmission Service. Non-Firm Point-To-Point Transmission Service over secondary Point(s) of Receipt and Point(s) of Delivery will have the lowest reservation priority under the Tariff.

**14.3 Use of Non-Firm Point-To-Point Transmission Service by the Transmission Provider:**

The Transmission Provider will be subject to the rates, terms and conditions of Part II of the Tariff when making Third-Party Sales under agreements executed on or after October 1, 2019. The Transmission Provider will maintain separate accounting, pursuant to Section 8, for any use of Non-Firm Point-To-Point Transmission Service to make Third-Party Sales.

**14.4 Service Agreements:**

The Transmission Provider shall offer a standard form Non-Firm Point-To-Point Transmission Service Agreement (Attachment A) to an Eligible Customer when it first submits a Completed Application for Non-Firm Point-To-Point Transmission Service pursuant to the Tariff.

**14.5 Classification of Non-Firm Point-To-Point Transmission Service:**

Non-Firm Point-To-Point Transmission Service shall be offered under terms and conditions contained in Part II of the Tariff. The Transmission Provider undertakes no obligation under the Tariff to plan its Transmission System in order to have sufficient capacity for Non-Firm Point-To-Point Transmission Service. Parties requesting Non-Firm Point-To-Point Transmission Service for the transmission of firm power do so with the full realization that such service is subject to availability and to Curtailment or Interruption under the terms of the Tariff. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that a Transmission Customer (including Third-Party Sales by the Transmission Provider) exceeds its non-firm capacity reservation. Non-Firm Point-To-Point Transmission Service shall include transmission of energy on an hourly basis and transmission of scheduled short-term capacity and energy on a daily, weekly or monthly basis, but not to exceed one month's reservation for any one Application, under Schedule 8.

**14.6 Scheduling of Non-Firm Point-To-Point Transmission Service:**

Schedules for Non-Firm Point-To-Point Transmission Service must be submitted to the Transmission Provider no later than 2:00 p.m. [or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] of the day prior to commencement of such service. Schedules submitted after 2:00 p.m. will be accommodated, if practicable. Hour-to-hour and intra-hour (four intervals consisting of fifteen minute schedules) schedules of energy that is to be delivered must be stated in increments of 1,000 kW per hour [or a reasonable increment that is generally accepted in the region and is consistently adhered to by

the Transmission Provider]. Transmission Customers within the Transmission Provider's service area with multiple requests for Transmission Service at a Point of Receipt, each of which is under 1,000 kW per hour, may consolidate their schedules at a common Point of Receipt into units of 1,000 kW per hour. Scheduling changes will be permitted twenty (20) minutes [or a reasonable time that is generally accepted in the region and is consistently adhered to by the Transmission Provider] before the start of the next scheduling interval, provided that the Delivering Party and Receiving Party also agree to the schedule modification. The Transmission Provider will furnish to the Delivering Party's system operator, hour-to-hour and intra-hour schedules equal to those furnished by the Receiving Party (unless reduced for losses) and shall deliver the capacity and energy provided by such schedules. Should the Transmission Customer, Delivering Party or Receiving Party revise or terminate any schedule, such party shall immediately notify the Transmission Provider, and the Transmission Provider shall have the right to adjust accordingly the schedule for capacity and energy to be received and to be delivered.

#### **14.7 Curtailment or Interruption of Service:**

The Transmission Provider reserves the right to Curtail, in whole or in part, Non-Firm Point-To-Point Transmission Service provided under the Tariff for reliability reasons when an emergency or other unforeseen condition threatens to impair or degrade the reliability of its Transmission System or the systems directly or indirectly interconnected with Transmission Provider's Transmission System. The Transmission Provider may elect to implement such Curtailments pursuant to the Procedures Addressing Parallel Flows specified in Attachment J. The Transmission Provider reserves the right to Interrupt, in whole or in part, Non-Firm Point-To-Point

Transmission Service provided under the Tariff for economic reasons in order to accommodate (1) a request for Firm Transmission Service, (2) a request for Non-Firm Point-To-Point Transmission Service of greater duration, (3) a request for Non-Firm Point-To-Point Transmission Service of equal duration with a higher price, (4) transmission service for Network Customers from non-designated resources, or (5) transmission service for Firm Point-To-Point Transmission Service during conditional curtailment periods as described in Section 15.4. The Transmission Provider also will discontinue or reduce service to the Transmission Customer to the extent that deliveries for transmission are discontinued or reduced at the Point(s) of Receipt. Where required, Curtailments or Interruptions will be made on a non-discriminatory basis to the transaction(s) that effectively relieve the constraint, however, Non-Firm Point-To-Point Transmission Service shall be subordinate to Firm Transmission Service. If multiple transactions require Curtailment or Interruption, to the extent practicable and consistent with Good Utility Practice, Curtailments or Interruptions will be made to transactions of the shortest term (e.g., hourly non-firm transactions will be Curtailed or Interrupted before daily non-firm transactions and daily non-firm transactions will be Curtailed or Interrupted before weekly non-firm transactions). Transmission service for Network Customers from resources other than designated Network Resources will have a higher priority than any Non-Firm Point-To-Point Transmission Service under the Tariff. Non-Firm Point-To-Point Transmission Service over secondary Point(s) of Receipt and Point(s) of Delivery will have a lower priority than any Non-Firm Point-To-Point Transmission Service under the Tariff. The Transmission Provider will provide

advance notice of Curtailment or Interruption where such notice can be provided consistent with Good Utility Practice. Transmission Provider shall take necessary measures to ensure reliability in BPA's BAA in accordance with Section 6 of Attachment Q.

## **15 Service Availability**

### **15.1 General Conditions:**

The Transmission Provider will provide Firm and Non-Firm Point-To-Point Transmission Service over, on or across its Transmission System to any Transmission Customer that has met the requirements of Section 16.

### **15.2 Determination of Available Transfer Capability:**

A description of the Transmission Provider's specific methodology for assessing available transfer capability posted on the Transmission Provider's OASIS (Section 4) is contained in Attachment C of the Tariff. In the event sufficient transfer capability may not exist to accommodate a service request, the Transmission Provider will respond by performing a System Impact Study. Notwithstanding anything to the contrary in this Tariff, the Transmission Provider will perform a System Impact Study to accommodate service requests on the Northwest AC Intertie and the Pacific DC Intertie at either its discretion or upon request by the Transmission Customer.

### **15.3 Initiating Service in the Absence of an Executed Service Agreement:**

If the Transmission Provider and the Transmission Customer requesting Firm or Non-Firm Point-To-Point Transmission Service cannot agree on all the terms and conditions of the Point-To-Point Service Agreement, the Transmission Provider shall commence providing Transmission Service subject to the Transmission Customer

agreeing to (i) compensate the Transmission Provider at the existing rate placed in effect pursuant to applicable Federal law, and (ii) comply with the terms and conditions of the Tariff including paying the appropriate security deposit and processing fees in accordance with the terms of Section 17.3. If the Transmission Customer cannot accept all of the terms and conditions of the offered Service Agreement, the Transmission Customer may request resolution of the unacceptable terms and conditions under Section 12, Dispute Resolution Procedures, of the Tariff. Any changes resulting from the Dispute Resolution Procedures will be effective upon the date of initial service.

**15.4 Obligation to Provide Transmission Service that Requires Expansion or Modification of the Transmission System, Redispatch or Conditional Curtailment:**

- (a) If the Transmission Provider determines that it cannot accommodate a Completed Application for Firm Point-To-Point Transmission Service because of insufficient capability on its Transmission System, the Transmission Provider will use due diligence to expand or modify its Transmission System to provide the requested Firm Transmission Service, consistent with its planning obligations in Attachment K, provided the Transmission Customer agrees to compensate the Transmission Provider for such costs pursuant to the terms of Section 27. The Transmission Provider will conform to Good Utility Practice and its planning obligations in Attachment K, in determining the need for new facilities and in the design and construction of such facilities. The obligation applies only to those facilities that the Transmission Provider has the right to expand or modify; it does not apply to requests for

service on the Northwest AC Intertie or the Pacific DC Intertie except that the Transmission Provider will continue to perform its planning obligations under Attachment K.

- (b) If the Transmission Provider determines that it cannot accommodate a Completed Application for Long-Term Firm Point-To-Point Transmission Service because of insufficient capability on its Transmission System, the Transmission Provider will use due diligence to provide redispatch from its own resources until (i) Network Upgrades are completed for the Transmission Customer, (ii) the Transmission Provider determines through a biennial reassessment that it can no longer reliably provide the redispatch, or (iii) the Transmission Customer terminates the service because of redispatch changes resulting from the reassessment. A Transmission Provider shall not unreasonably deny self-provided redispatch or redispatch arranged by the Transmission Customer from a third party resource.
- (c) If the Transmission Provider determines that it cannot accommodate a Completed Application for Long-Term Firm Point-To-Point Transmission Service because of insufficient capability on its Transmission System, the Transmission Provider will use due diligence to provide the Firm Transmission Service with the conditions that (i) the Transmission Provider may curtail the service prior to the curtailment of other Firm Transmission Service for a specified number of hours per year or during System Conditions, and (ii) the Transmission Customer



must submit schedules with Point(s) of Receipt and Point(s) of Delivery that are the same as the Point(s) of Receipt and Point(s) of Delivery included in the Transmission Customer's reservation. If the Transmission Customer accepts the service, the Transmission Provider will use due diligence to provide the service until (i) Network Upgrades are completed for the Transmission Customer, (ii) the Transmission Provider determines through a biennial reassessment that it can no longer reliably provide such service, or (iii) the Transmission Customer terminates the service because the reassessment increased the number of hours per year of conditional curtailment or changed the System Conditions.

**15.5 Deferral of Service:**

The Transmission Provider may defer providing service until it completes construction of new transmission facilities or upgrades needed to provide Firm Point-To-Point Transmission Service whenever the Transmission Provider determines that providing the requested service would, without such new facilities or upgrades, impair or degrade reliability to any existing firm services.

**15.6 Other Transmission Service Schedules:**

Eligible Customers receiving transmission service under other agreements may continue to receive transmission service under those agreements.

**15.7 Real Power Losses:**

Real Power Losses are associated with all transmission service. The Transmission Provider is not obligated to provide Real Power Losses. The Transmission Customer

is responsible for replacing losses associated with all transmission service, excluding EIM participation, as calculated by the Transmission Provider under Schedule 11.

## **16 Transmission Customer Responsibilities**

### **16.1 Conditions Required of Transmission Customers:**

Point-To-Point Transmission Service shall be provided by the Transmission Provider only if the following conditions are satisfied by the Transmission Customer:

- (a) The Transmission Customer has pending a Completed Application for service;
- (b) The Transmission Customer meets the creditworthiness criteria set forth in Attachment M;
- (c) The Transmission Customer will have arrangements in place for any other transmission service necessary to effect the delivery from the generating source to the Transmission Provider prior to the time service under Part II of the Tariff commences;
- (d) The Transmission Customer agrees to pay for any facilities constructed and chargeable to such Transmission Customer under Part II of the Tariff, whether or not the Transmission Customer takes service for the full term of its reservation;
- (e) The Transmission Customer provides the information required by the Transmission Provider's planning process established in Attachment K;
- (f) The Transmission Customer has executed a Point-To-Point Service Agreement or has agreed to receive service pursuant to Section 15.3; and
- (g) The Transmission Customer must comply with the requirements of Attachment Q regarding the EIM.

**16.2 Transmission Customer Responsibility for Third-Party Arrangements:**

Any scheduling arrangements that may be required by other electric systems shall be the responsibility of the Transmission Customer requesting service. The Transmission Customer shall provide, unless waived by the Transmission Provider, notification to the Transmission Provider identifying such systems and authorizing them to schedule the capacity and energy to be transmitted by the Transmission Provider pursuant to Part II of the Tariff on behalf of the Receiving Party at the Point of Delivery or the Delivering Party at the Point of Receipt. However, the Transmission Provider will undertake reasonable efforts to assist the Transmission Customer in making such arrangements, including without limitation, providing any information or data required by such other electric system pursuant to Good Utility Practice.

**17 Procedures for Arranging Firm Point-To-Point Transmission Service****17.1 Application:**

A request for Firm Point-To-Point Transmission Service for periods of one year or longer must be submitted over the Transmission Provider's OASIS at least sixty (60) days in advance of the calendar month in which service is to commence. The Transmission Provider will consider requests for such firm service on shorter notice when feasible. Requests for firm service for periods of less than one year shall be subject to expedited procedures that shall be negotiated between the Parties within the time constraints provided in Section 17.5. All Firm Point-To-Point Transmission Service requests should be submitted by entering the information listed below on the Transmission Provider's OASIS. Until OASIS can accept all such information, any required information that OASIS cannot accept may be submitted by transmitting the

required information to the Transmission Provider by telefax or by United States mail or other recognized delivery service. In appropriate cases, the Transmission Provider will accept all information by such means. In such cases, the Transmission Provider will post the request on OASIS.

### **17.2 Completed Application:**

A Completed Application shall provide all of the information included in 18 C.F.R § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the entity requesting service;
- (ii) A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) The location of the Point(s) of Receipt and Point(s) of Delivery and the identities of the Delivering Parties and the Receiving Parties;
- (iv) The location of the generating facility(ies) supplying the capacity and energy and the location of the load ultimately served by the capacity and energy transmitted. The Transmission Provider will treat this information as confidential except to the extent that disclosure of this information is required by this Tariff, by regulatory or judicial order, for reliability purposes pursuant to Good Utility Practice or pursuant to RTG transmission information sharing agreements. The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations;
- (v) A description of the supply characteristics of the capacity and energy to be delivered;

- (vi) An estimate of the capacity and energy expected to be delivered to the Receiving Party;
- (vii) The Service Commencement Date and the term of the requested Transmission Service;
- (viii) The transmission capacity requested for each Point of Receipt and each Point of Delivery on the Transmission Provider's Transmission System; customers may combine their requests for service in order to satisfy the minimum transmission capacity requirement;
- (ix) A statement indicating that, if the Eligible Customer submits a Pre-Confirmed Application, the Eligible Customer will execute a Service Agreement upon receipt of notification that the Transmission Provider can provide the requested Transmission Service;
- (x) Any additional information required by the Transmission Provider's planning process established in Attachment K; and
- (xi) A statement of which Ancillary Services the Eligible Customer will purchase from the Transmission Provider.

The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

### **17.3 Deposit:**

A Completed Application for Long-Term Firm Point-To-Point Transmission Service also shall include (i) a deposit of one month's charge for Reserved Capacity; and (ii) a non-refundable processing fee. Deposits shall be made either to the Transmission Provider (which deposit shall not earn interest) or into an escrow fund set up by the Transmission Customer. If the Application is rejected by the Transmission Provider

because it does not meet the conditions for service as set forth herein, or in the case of requests for service arising in connection with losing bidders in a Request For Proposals (RFP), the Transmission Provider shall authorize the release of the escrow funds, or if the deposit is made with the Transmission Provider, shall return the deposit without interest. The Transmission Provider shall authorize the release of the escrow funds or, shall return the deposit, without interest if the Transmission Provider is unable to complete new facilities needed to provide the service. If an Application is withdrawn or the Eligible Customer decides not to enter into a Service Agreement for Firm Point-To-Point Transmission Service, the Transmission Provider shall authorize the release of the escrow funds or shall refund the deposit in full, without interest.

Deposits associated with construction of new facilities are subject to the provisions of Section 19. If a Service Agreement for Firm Point-To-Point Transmission Service is executed, the deposit, without interest, will be returned or the release of the escrow funds authorized to the Transmission Customer within 30 calendar days of the date on which the executed Service Agreement is received by the Transmission Provider.

#### **17.4 Notice of Deficient Application:**

If an Application fails to meet the requirements of the Tariff, the Transmission Provider shall notify the entity requesting service within fifteen (15) days of receipt of the reasons for such failure. The Transmission Provider will attempt to remedy minor deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Provider shall return the Application, along with any deposit, without interest or authorize the release of any escrow funds. Upon receipt of a new or revised Application that fully

complies with the requirements of Part II of the Tariff, the Eligible Customer shall be assigned a new priority consistent with the date of the new or revised Application.

**17.5 Response to a Completed Application:**

Following receipt of a Completed Application for Firm Point-To-Point Transmission Service, the Transmission Provider shall make a determination of available transfer capability as required in Section 15.2. The Transmission Provider shall notify the Eligible Customer as soon as practicable, but not later than thirty (30) days after the date of receipt of a Completed Application that (i) it will be able to provide service without performing a System Impact Study, (ii) such a study is needed to evaluate the impact of the Application pursuant to Section 19.1, or (iii) such a study is needed to evaluate the impact of the Application and that the Transmission Provider will perform a Cluster Study pursuant to Section 19.10 to evaluate such impact, or (iv) the request is for service on the Northwest AC Intertie or the Pacific DC Intertie and the Transmission Provider will perform System Impact and Cluster Studies at either its discretion or request of the Eligible Customer. Responses by the Transmission Provider must be made as soon as practicable to all completed applications (including applications by its own merchant function) and the timing of such responses must be made on a non-discriminatory basis.

If the Transmission Provider notifies the Eligible Customer that a System Impact Study is needed to evaluate the impact of the Application and that the Transmission Provider will perform a Cluster Study pursuant to Section 19.10 to evaluate such impact, the Eligible Customer may, at any time prior to the posting of the OASIS notice described in Section 19.10(i), request in writing that the Transmission Provider study the Application individually rather than in a Cluster Study, and the

Transmission Provider will offer the Eligible Customer a System Impact Study Agreement pursuant to Section 19.1 and will otherwise process the Application on an individual basis.

**17.6.1 Execution of Service Agreement:**

Except as provided in Section 17.6.2 below, whenever the Transmission Provider determines that a System Impact Study is not required and that the service can be provided, it shall notify the Eligible Customer as soon as practicable but no later than thirty (30) days after receipt of the Completed Application. Where a System Impact Study is required, the provisions of Section 19 (and, where applicable, Section 17.6.2) will govern the execution of a Service Agreement. Failure of an Eligible Customer to execute and return the Service Agreement or request to initiate service in the absence of an executed Service Agreement pursuant to Section 15.3, within fifteen (15) days after it is tendered by the Transmission Provider will be deemed a withdrawal and termination of the Application and any deposit submitted shall be refunded, without interest, or the release of any escrow funds authorized. Nothing herein limits the right of an Eligible Customer to file another Application after such withdrawal and termination.

**17.6.2 Tender and Execution of Service Agreement Where Environmental Review Required**

In the event that environmental review associated with a request is required, the Transmission Provider shall tender a Service Agreement as soon as possible after the completion of any necessary environmental review and development of any necessary environmental mitigation requirements. Failure of an Eligible Customer to execute and return the Service Agreement or request to initiate service in the absence



of an executed Service Agreement pursuant to Section 15.3, within fifteen (15) days after it is tendered by the Transmission Provider will be deemed a withdrawal and termination of the Application and any deposit submitted shall be refunded, without interest, or the release of any escrow funds authorized. Nothing herein limits the right of an Eligible Customer to file another Application after such withdrawal and termination.

#### **17.7 Extensions for Commencement of Service:**

The Transmission Customer can obtain, subject to availability, up to five (5) one-year extensions for the commencement of service. The Transmission Customer may postpone service by paying a non-refundable annual reservation fee equal to one month's charge for Firm Transmission Service for each year or fraction thereof. If during any extension for the commencement of service an Eligible Customer submits a Completed Application for Firm Transmission Service, and such request can be satisfied only by releasing all or part of the Transmission Customer's Reserved Capacity, the original Reserved Capacity will be released unless the following condition is satisfied. Within thirty (30) days, the original Transmission Customer agrees to pay the Firm Point-To-Point transmission rate for its Reserved Capacity concurrent with the new Service Commencement Date. In the event the Transmission Customer elects to release the Reserved Capacity, the reservation fees or portions thereof previously paid will be forfeited.

### **18 Procedures for Arranging Non-Firm Point-To-Point Transmission Service**

#### **18.1 Application:**

Eligible Customers seeking Non-Firm Point-To-Point Transmission Service must submit a Completed Application to the Transmission Provider. Applications should

be submitted by entering the information listed below on the Transmission Provider's OASIS. Prior to implementation of the Transmission Provider's OASIS, a Completed Application may be submitted by (i) transmitting the required information to the Transmission Provider by telefax, or (ii) providing the information by telephone over the Transmission Provider's time recorded telephone line. Each of these methods will provide a time-stamped record for establishing the service priority of the Application.

### **18.2 Completed Application:**

A Completed Application shall provide all of the information included in 18 C.F.R § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the entity requesting service;
- (ii) (A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) The Point(s) of Receipt and the Point(s) of Delivery;
- (iv) The maximum amount of capacity requested at each Point of Receipt and Point of Delivery; and
- (v) The proposed dates and hours for initiating and terminating transmission service hereunder.

In addition to the information specified above, when required to properly evaluate system conditions, the Transmission Provider also may ask the Transmission Customer to provide the following:

- (vi) The electrical location of the initial source of the power to be transmitted pursuant to the Transmission Customer's request for service; and

- (vii) The electrical location of the ultimate load.

The Transmission Provider will treat this information in (vi) and (vii) as confidential at the request of the Transmission Customer except to the extent that disclosure of this information is required by this Tariff, by regulatory or judicial order, for reliability purposes pursuant to Good Utility Practice, or pursuant to RTG transmission information sharing agreements. The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

- (viii) A statement indicating that, if the Eligible Customer submits a Pre-Confirmed Application, the Eligible Customer will execute a Service Agreement upon receipt of notification that the Transmission Provider can provide the requested Transmission Service.

### **18.3 Reservation of Non-Firm Point-To-Point Transmission Service:**

Requests for monthly service shall be submitted no earlier than sixty (60) days before service is to commence; requests for weekly service shall be submitted no earlier than fourteen (14) days before service is to commence, requests for daily service shall be submitted no earlier than two (2) days before service is to commence, and requests for hourly service shall be submitted no earlier than 10:00 a.m. on the day before service is to commence. Requests for service received later than 2:00 p.m. prior to the day service is scheduled to commence will be accommodated if practicable [or such reasonable times that are generally accepted in the region and are consistently adhered to by the Transmission Provider].

**18.4 Determination of Available Transfer Capability:**

Following receipt of a tendered schedule the Transmission Provider will make a determination on a non-discriminatory basis of available transfer capability pursuant to Section 15.2. Such determination shall be made as soon as reasonably practicable after receipt, but not later than the following time periods for the following terms of service (i) thirty (30) minutes for hourly service, (ii) thirty (30) minutes for daily service, (iii) four (4) hours for weekly service, and (iv) two (2) days for monthly service. [Or such reasonable times that are generally accepted in the region and are consistently adhered to by the Transmission Provider].

**19 Additional Study Procedures For Firm Point-To-Point Transmission Service Requests****19.1 Notice of Need for System Impact Study:**

After receiving a request for service, the Transmission Provider shall determine on a non-discriminatory basis whether a System Impact Study is needed. For requests on the Northwest AC Intertie or Pacific DC Intertie, the Transmission Provider performs System Impact and Cluster Studies at either its discretion or the request of the Transmission Customer. A description of the Transmission Provider's methodology for completing a System Impact Study is provided in Attachment D. If the Transmission Provider determines that a System Impact Study is necessary to accommodate the requested service, it shall so inform the Eligible Customer, as soon as practicable. Once informed, the Eligible Customer shall timely notify the Transmission Provider if it elects to have the Transmission Provider study redispatch or conditional curtailment as part of the System Impact Study. If notification is provided prior to tender of the System Impact Study Agreement, the Eligible

Customer can avoid the costs associated with the study of these options. If (i) the Transmission Provider notifies the Eligible Customer that it will be studying the service request individually rather than in a Cluster Study, or (ii) the Eligible Customer requests in writing to be studied individually, the Transmission Provider shall as soon as practicable, but no later than thirty (30) days from the notification under (i) or receipt of the written request under (ii), tender a System Impact Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required System Impact Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the System Impact Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the System Impact Study Agreement, its application shall be deemed withdrawn and, pursuant to Section 17.3, its deposit shall be returned, without interest, or the release of its escrow funds authorized.

**19.1.1 Notice of Need for Environmental Review:**

If the Transmission Provider determines that environmental review is required in response to a request for service, the Transmission Provider shall tender an environmental review agreement as soon as practicable. Pursuant to such agreement the Eligible Customer shall agree to reimburse the Transmission Provider for performing the environmental review. The Eligible Customer shall execute and return the environmental review agreement within 30 days of receipt or its application shall be deemed withdrawn and its deposit, pursuant to Section 29.2, shall be returned, without interest, or the release of its escrow funds authorized.

**19.2 System Impact Study Agreement and Cost Reimbursement:**

- (i) The System Impact Study Agreement will clearly specify the Transmission Provider's estimate of the actual cost, and time for completion of the System Impact Study. The charge shall not exceed the actual cost of the study. In performing the System Impact Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. The Eligible Customer will not be assessed a charge for such existing studies; however, the Eligible Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the Eligible Customer's request for service on the Transmission System.
- (ii) If in response to multiple Eligible Customers requesting service in relation to the same competitive solicitation, a single System Impact Study is sufficient for the Transmission Provider to accommodate the requests for service, the costs of that study shall be pro-rated among the Eligible Customers.
- (iii) For System Impact Studies that the Transmission Provider conducts on its own behalf, the Transmission Provider shall record the cost of the System Impact Studies pursuant to Section 8.

**19.3 System Impact Study Procedures:**

Upon receipt of an executed System Impact Study Agreement, the Transmission Provider will use due diligence to complete the required System Impact Study within a sixty (60) day period. The System Impact Study shall identify (1) any system

constraints, identified with specificity by transmission element or flowgate, (2) redispatch options (when requested by an Eligible Customer) including an estimate of the cost of redispatch, (3) conditional curtailment options (when requested by an Eligible Customer) including the number of hours per year and the System Conditions during which conditional curtailment may occur, and (4) additional Direct Assignment Facilities or Network Upgrades required to provide the requested service. For customers requesting the study of redispatch options, the System Impact Study shall (1) identify all resources located within the Transmission Provider's Control Area that can significantly contribute toward relieving the system constraint and (2) provide a measurement of each resource's impact on the system constraint. If the Transmission Provider possesses information indicating that any resource outside its Control Area could relieve the constraint, it shall identify each such resource in the System Impact Study. In the event that the Transmission Provider is unable to complete the required System Impact Study within such time period, it shall so notify the Eligible Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. A copy of the completed System Impact Study and related work papers shall be made available to the Eligible Customer as soon as the System Impact Study is complete. The Transmission Provider will use the same due diligence in completing the System Impact Study for an Eligible Customer as it uses when completing studies for itself. The Transmission Provider shall notify the Eligible Customer immediately upon completion of the System Impact Study if the Transmission System will be adequate to accommodate all or part of a request for service or that

no costs are likely to be incurred for new transmission facilities or upgrades. Except as provided in Section 17.6.2, in order for a request to remain a Completed Application, within fifteen (15) days of completion of the System Impact Study the Eligible Customer must execute a Service Agreement or request to initiate service in the absence of an executed Service Agreement pursuant to Section 15.3, or the Application shall be deemed terminated and withdrawn.

#### **19.4 Facilities Study Procedures:**

If a System Impact Study indicates that additions or upgrades to the Transmission System are needed to supply the Eligible Customer's service request, the Transmission Provider, within thirty (30) days of the completion of the System Impact Study, shall tender to the Eligible Customer a Facilities Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required Facilities Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the Facilities Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the Facilities Study Agreement, its application shall be deemed withdrawn and pursuant to Section 17.3, its deposit shall be returned, without interest, or the release of its escrow funds authorized. Upon receipt of an executed Facilities Study Agreement, the Transmission Provider will use due diligence to complete the required Facilities Study within a sixty (60) day period. If the Transmission Provider is unable to complete the Facilities Study in the allotted time period, the Transmission Provider shall notify the Transmission Customer and provide an estimate of the time needed to reach a final determination along with an explanation of the reasons that additional time is required to complete



the study. When completed, the Facilities Study will include a good faith estimate of (i) the cost of Direct Assignment Facilities to be charged to the Transmission Customer, (ii) the Transmission Customer's appropriate share of the cost of any required Network Upgrades as determined pursuant to the provisions of Part II of the Tariff, and (iii) the time required to complete such construction and initiate the requested service. The Transmission Customer shall provide the Transmission Provider with a letter of credit or other reasonable form of security acceptable to the Transmission Provider equivalent to the costs of new facilities or upgrades consistent with commercial practices as established by the Uniform Commercial Code. Except as provided in Section 17.6.2, the Transmission Customer shall have thirty (30) days to execute a Service Agreement or request to initiate service in the absence of an executed Service Agreement pursuant to Section 15.3 and provide the required letter of credit or other form of security or the request will no longer be a Completed Application and shall be deemed terminated and withdrawn.

#### **19.5 Facilities Study Modifications:**

Any change in design arising from inability to site or construct facilities as proposed will require development of a revised good faith estimate. New good faith estimates also will be required in the event of new statutory or regulatory requirements that are effective before the completion of construction or other circumstances beyond the control of the Transmission Provider that significantly affect the final cost of new facilities or upgrades to be charged to the Transmission Customer pursuant to the provisions of Part II of the Tariff.

**19.6 Due Diligence in Completing New Facilities:**

The Transmission Provider shall use due diligence to add necessary facilities or upgrade its Transmission System within a reasonable time. The Transmission Provider will not upgrade its existing or planned Transmission System in order to provide the requested Firm Point-To-Point Transmission Service if doing so would impair system reliability or otherwise impair or degrade existing firm service.

**19.7 Partial Interim Service:**

If the Transmission Provider determines that it will not have adequate transfer capability to satisfy the full amount of a Completed Application for Firm Point-To-Point Transmission Service, the Transmission Provider nonetheless shall be obligated to offer and provide the portion of the requested Firm Point-To-Point Transmission Service that can be accommodated without addition of any facilities and through redispatch. However, the Transmission Provider shall not be obligated to provide the incremental amount of requested Firm Point-To-Point Transmission Service that requires the addition of facilities or upgrades to the Transmission System until such facilities or upgrades have been placed in service.

**19.8 Expedited Procedures for New Facilities:**

In lieu of the procedures set forth above, the Eligible Customer shall have the option to expedite the process by requesting the Transmission Provider to tender at one time, together with the results of required studies, an "Expedited Service Agreement" pursuant to which the Eligible Customer would agree to compensate the Transmission Provider for all costs incurred pursuant to the terms of the Tariff. In order to exercise this option, the Eligible Customer shall request in writing an expedited Service Agreement covering all of the above-specified items within thirty

(30) days of receiving the results of the System Impact Study identifying needed facility additions or upgrades or costs incurred in providing the requested service. While the Transmission Provider agrees to provide the Eligible Customer with its best estimate of the new facility costs and other charges that may be incurred, such estimate shall not be binding and the Eligible Customer must agree in writing to compensate the Transmission Provider for all costs incurred pursuant to the provisions of the Tariff. The Eligible Customer shall execute and return such an Expedited Service Agreement within fifteen (15) days of its receipt or the Eligible Customer's request for service will cease to be a Completed Application and will be deemed terminated and withdrawn.

### **19.9 Study Metrics**

Sections 19.3, 19.4 and 19.10(i) require a Transmission Provider to use due diligence to meet study completion deadlines for System Impact Studies, Facilities Studies, and Cluster Studies. For the purposes of calculating the percentage of non-Affiliates' System Impact Studies and Facilities Studies processed outside of the study completion deadlines, the Transmission Provider shall consider all System Impact Studies, Facilities Studies, and Cluster Studies that it completes for non-Affiliates during the calendar quarter. The percentage should be calculated by dividing the number of those studies which are completed on time by the total number of completed studies.

### **19.10 Cluster Study**

#### **(i) Cluster Study Procedures**

The Transmission Provider may conduct a Cluster Study on its own initiative or in response to a written request by Eligible Customer(s) with pending service

request(s). If Eligible Customer(s) request a Cluster Study, the Transmission Provider will determine, in its discretion, if it can reasonably accommodate the request(s) and will notify such Eligible Customers of its decision. If the Transmission Provider decides to conduct a Cluster Study, it will post notice of its decision on OASIS, and will provide reasonable advance notification to Eligible Customers, including the eligibility of Applications for the Cluster Study, the timing and process for conducting the Cluster Study, the reasons for the Cluster Study, and whether the Transmission Provider will require a Precedent Transmission Service Agreement. For purposes of a Cluster Study, the Transmission Provider may aggregate: (1) all Applications that are submitted within a set time period, including Applications that were submitted before the Transmission Provider notified Eligible Customers that it will conduct a Cluster Study, (2) all requests for service over a particular transmission path, (3) all requests for service of at least a certain amount of capacity, or (4) all requests that the Transmission Provider determines are suitable for aggregation based on other appropriate criteria, including a combination of criteria.

Except for Eligible Customers that have requested individual studies under Section 17.5, the Transmission Provider will require Eligible Customers with service request(s) that the Transmission Provider identifies for a Cluster Study to sign Cluster Study agreements or Precedent Transmission Service Agreements that provide that the System Impact Study, Facilities Study, or environmental review for the service request(s) will be performed as a Cluster Study. With respect to a clustered System Impact Study or Facilities Study, the study will be performed in

accordance with the procedures set forth in Section 19.3 and 19.4 with the exception that the timeline for performing the System Impact Study or Facilities Study will begin to run after the last date for any Eligible Customer with service request(s) that the Transmission Provider identifies for the Cluster Study to sign and return Cluster Study Agreements or Precedent Transmission Services Agreements. With respect to a Cluster Study that includes aggregate study of system impacts and needed facilities, the Transmission Provider will initiate the Cluster Study within 14 days of the later of (i) the due date for the Precedent Transmission Service Agreement (PTSA) or (ii) the due date for providing performance assurance as required by the PTSA. The Transmission Provider will use due diligence to complete the Cluster Study within 120 days from such date. If the Transmission Provider is unable to complete the Cluster Study within the applicable timeline, the Transmission Provider will notify the Eligible Customers in the Cluster Study and provide an estimate of the time needed to complete the study along with an explanation of the reasons that additional time is required.

(ii) Cluster Study Agreement

The Transmission Provider will require Eligible Customers with service request(s) that the Transmission Provider identifies for a Cluster Study to sign Cluster Study agreements for the service request(s) unless the Transmission Provider requires such Eligible Customers to sign Precedent Transmission Service Agreements for the service request(s) under Section 19.10(iii). The Transmission Provider may conduct a Cluster Study for which the Transmission Provider requires Eligible Customers to sign Cluster Study agreements when: (1) preliminary analysis indicates that

constructing new facilities or upgrades that the study identifies would facilitate providing service to multiple pending service requests; (2) preliminary analysis indicates that the Cluster Study would benefit the integration of new renewable resources; (3) at least one Eligible Customer requests that the Transmission Provider perform a Cluster Study pursuant to Section 19.10(i); or (4) the Transmission Provider determines, based on other appropriate criteria, that conducting a Cluster Study will facilitate providing service.

The Cluster Study agreement will describe the scope of the Cluster Study. An Eligible Customer must sign and return the Cluster Study agreement within 15 days of receipt. If an Eligible Customer fails to sign and return the Cluster Study agreement by the deadline stated in this paragraph or to advance fund the study costs, the Eligible Customer's service request(s) will be deemed withdrawn, the Transmission Provider will give the request(s) no further consideration, and the Eligible Customer's deposit provided pursuant to Section 17.3 will be returned, without interest, or the release of its escrow funds authorized.

A Cluster Study agreement will include the Transmission Provider's good faith estimate of the actual study costs and will require each Eligible Customer with service request(s) in the Cluster Study to advance fund a percentage of the study costs equal to the megawatts of the Eligible Customer's service request(s) divided by the total number of megawatts of all service requests included in the Cluster Study. Upon completing the Cluster Study, the Transmission Provider will determine the actual study costs. If the aggregate amount of the advance funding differs from the actual costs of the Cluster Study, the Transmission Provider will request additional

funds from, or refund the excess amount to, the Eligible Customers with service request(s) in the Cluster Study, in proportion to the amounts previously advanced by each Eligible Customer. Eligible Customers must advance additional funds requested, if any, within 30 days of the request.

An Eligible Customer that has signed a Cluster Study agreement may opt out of a Cluster Study by withdrawing its service request(s) on OASIS. An Eligible Customer that withdraws service request(s) on OASIS after signing a Cluster Study agreement will remain liable for its percentage of the study costs and will be liable for any costs of re-study or analysis that result from the Eligible Customer opting out.

(iii) Precedent Transmission Service Agreement

The Transmission Provider may require Eligible Customers with service request(s) that the Transmission Provider identifies for a Cluster Study to sign Precedent Transmission Service Agreements for the service request(s). The Transmission Provider will bear the costs of a Cluster Study for service requests for which Eligible Customers sign Precedent Transmission Service Agreements, and the Transmission Provider will not require Eligible Customers to also sign Cluster Study agreements for such a study.

The Precedent Transmission Service Agreements will obligate the Eligible Customers to take transmission service at the rate for Long-Term Firm PTP Transmission Service in the Transmission Provider's Point-To-Point rate schedule if the Transmission Provider satisfies conditions in the agreement that will include, but will not necessarily be limited to (1) determining in its discretion that it may

reasonably provide transmission service at such rate, after considering, without limitation, the amount of subscription under Precedent Transmission Service Agreements and the benefits to the Transmission System of any new facilities needed to provide service to the service requests in the Cluster Study, and (2) in the event that the Transmission Provider must construct new facilities or facility upgrades to provide the requested service, the Transmission Provider decides, after completing environmental review, to build such facilities.

The Transmission Provider will provide Eligible Customers at least 15 days to sign and return the Precedent Transmission Service Agreements. If an Eligible Customer fails to sign and return the Precedent Transmission Service Agreement by the deadline that the Transmission Provider establishes or to meet any requirement specified in such agreement, the Eligible Customer's service request(s) will be deemed withdrawn, the Transmission Provider will give the service request(s) no further consideration, and the Eligible Customer's deposit provided pursuant to Section 17.3 will be returned, without interest, or the release of its escrow funds authorized.

An Eligible Customer that signs a Precedent Transmission Service Agreement will provide security equivalent to the charges for twelve (12) months of service for the Eligible Customer's service request(s). A security deposit provided pursuant to this paragraph will be made either (1) to the Transmission Provider (which shall not earn interest), or (2) into an escrow fund set up by the Transmission Customer consistent with the provisions of the Precedent Transmission Service Agreement.



The Transmission Provider will provide Eligible Customers that are offered a Precedent Transmission Service Agreement the option under such agreement to extend the term of service initially requested by the customers without filing a new Application. An extension of the term of service pursuant to this paragraph will not be subject to competition under Section 2.2.

## **20 Procedures if The Transmission Provider is Unable to Complete New Transmission Facilities for Firm Point-To-Point Transmission Service**

### **20.1 Delays in Construction of New Facilities:**

If any event occurs that will materially affect the time for completion of new facilities, or the ability to complete them, the Transmission Provider shall promptly notify the Transmission Customer. In such circumstances, the Transmission Provider shall within thirty (30) days of notifying the Transmission Customer of such delays, convene a technical meeting with the Transmission Customer to evaluate the alternatives available to the Transmission Customer. The Transmission Provider also shall make available to the Transmission Customer studies and work papers related to the delay, including all information that is in the possession of the Transmission Provider that is reasonably needed by the Transmission Customer to evaluate any alternatives.

### **20.2 Alternatives to the Original Facility Additions:**

When the review process of Section 20.1 determines that one or more alternatives exist to the originally planned construction project, the Transmission Provider shall present such alternatives for consideration by the Transmission Customer. If, upon review of any alternatives, the Transmission Customer desires to maintain its Completed Application subject to construction of the alternative facilities, it may

request the Transmission Provider to submit a revised Service Agreement for Firm Point-To-Point Transmission Service. If the alternative approach solely involves Non-Firm Point-To-Point Transmission Service, the Transmission Provider shall promptly tender a Service Agreement for Non-Firm Point-To-Point Transmission Service providing for the service. In the event the Transmission Provider concludes that no reasonable alternative exists and the Transmission Customer disagrees, the Transmission Customer may seek relief under the dispute resolution procedures pursuant to Section 12.

### **20.3 Refund Obligation for Unfinished Facility Additions:**

If the Transmission Provider and the Transmission Customer mutually agree that no other reasonable alternatives exist and the requested service cannot be provided out of existing capability under the conditions of Part II of the Tariff, the obligation to provide the requested Firm Point-To-Point Transmission Service shall terminate and any deposit made by the Transmission Customer shall be returned, without interest, or the release of its escrow funds authorized. However, the Transmission Customer shall be responsible for all prudently incurred costs by the Transmission Provider through the time construction was suspended.

## **21 Provisions Relating to Transmission Construction and Services on the Systems of Other Utilities**

### **21.1 Responsibility for Third-Party System Additions:**

The Transmission Provider shall not be responsible for making arrangements for any necessary engineering, permitting, and construction of transmission or distribution facilities on the system(s) of any other entity or for obtaining any regulatory approval for such facilities. The Transmission Provider will undertake reasonable efforts to

assist the Transmission Customer in obtaining such arrangements, including without limitation, providing any information or data required by such other electric system pursuant to Good Utility Practice.

### **21.2 Coordination of Third-Party System Additions:**

In circumstances where the need for transmission facilities or upgrades is identified pursuant to the provisions of Part II of the Tariff, and if such upgrades further require the addition of transmission facilities on other systems, the Transmission Provider shall have the right to coordinate construction on its own system with the construction required by others. The Transmission Provider, after consultation with the Transmission Customer and representatives of such other systems, may defer construction of its new transmission facilities, if the new transmission facilities on another system cannot be completed in a timely manner. The Transmission Provider shall notify the Transmission Customer in writing of the basis for any decision to defer construction and the specific problems which must be resolved before it will initiate or resume construction of new facilities. Within sixty (60) days of receiving written notification by the Transmission Provider of its intent to defer construction pursuant to this section, the Transmission Customer may challenge the decision in accordance with the dispute resolution procedures pursuant to Section 12.

## **22 Changes in Service Specifications**

### **22.1 Modifications On a Non-Firm Basis:**

The Transmission Customer taking Firm Point-To-Point Transmission Service may request the Transmission Provider to provide transmission service on a non-firm basis over Receipt and Delivery Points other than those specified in the Service Agreement (“Secondary Receipt and Delivery Points”), in amounts not to exceed its

firm capacity reservation, without incurring an additional Non-Firm Point-To-Point Transmission Service charge or executing a new Service Agreement, subject to the following conditions.

- (a) Service provided over Secondary Receipt and Delivery Points will be non-firm only, on an as-available basis and will not displace any firm or non-firm service reserved or scheduled by third-parties under the Tariff or by the Transmission Provider on behalf of its Native Load Customers.
- (b) The sum of all Firm and non-firm Point-To-Point Transmission Service provided to the Transmission Customer at any time pursuant to this section shall not exceed the Reserved Capacity in the relevant Service Agreement under which such services are provided.
- (c) The Transmission Customer shall retain its right to schedule Firm Point-To-Point Transmission Service at the Receipt and Delivery Points specified in the relevant Service Agreement in the amount of its original capacity reservation.
- (d) Service over Secondary Receipt and Delivery Points on a non-firm basis shall not require the filing of an Application for Non-Firm Point-To-Point Transmission Service under the Tariff. However, all other requirements of Part II of the Tariff (except as to transmission rates) shall apply to transmission service on a non-firm basis over Secondary Receipt and Delivery Points.
- (e) If and to the extent the Transmission Provider's rates for Transmission Service on its Transmission System are segmented, (i) the sum of the

capacity provided at Primary and Secondary Points of Receipt for Transmission Service under a Service Agreement on any segment shall not exceed the firm capacity reservation at Primary Points of Receipt in such Service Agreement for such segment; and (ii) the sum of the capacity provided at Primary and Secondary Points of Delivery for Transmission Service under a Service Agreement on any segment shall not exceed the firm capacity reservation at Primary Points of Delivery in such Service Agreement for such segment.

#### **22.2 Modification On a Firm Basis:**

Any request by a Transmission Customer to modify Receipt and Delivery Points on a firm basis shall be treated as a new request for service in accordance with Section 17 hereof, except that such Transmission Customer shall not be obligated to pay any additional deposit if the capacity reservation does not exceed the amount reserved in the existing Service Agreement. While such new request is pending, the Transmission Customer shall retain its priority for service at the existing firm Receipt and Delivery Points specified in its Service Agreement.

### **23 Sale or Assignment of Transmission Service**

#### **23.1 Procedures for Assignment or Transfer of Service:**

- (a) A Transmission Customer may sell, assign, or transfer all or a portion of its rights under its Service Agreement, but only to another Eligible Customer (the Assignee). The Transmission Customer that sells, assigns or transfers its rights under its Service Agreement is hereafter referred to as the Reseller. Compensation to Resellers shall be at rates established by agreement between the Reseller and the Assignee.

- (b) If the Assignee does not request any change in the Point(s) of Receipt or the Point(s) of Delivery, or a change in any other term or condition set forth in the original Service Agreement, the Assignee will receive the same services as did the Reseller and the priority of service for the Assignee will be the same as that of the Reseller. The Assignee will be subject to all terms and conditions of this Tariff. If the Assignee requests a change in service, the reservation priority of service will be determined by the Transmission Provider pursuant to Section 13.2.

**23.2 Limitations on Assignment or Transfer of Service:**

If the Assignee requests a change in the Point(s) of Receipt or Point(s) of Delivery, or a change in any other specifications set forth in the original Service Agreement, the Transmission Provider will consent to such change subject to the provisions of the Tariff, provided that the change will not impair the operation and reliability of the Transmission Provider's generation, transmission, or distribution systems. The Assignee shall compensate the Transmission Provider for performing any System Impact Study needed to evaluate the capability of the Transmission System to accommodate the proposed change and any additional costs resulting from such change. The Reseller shall remain liable for the performance of all obligations under the Service Agreement, except as specifically agreed to by the Transmission Provider and the Reseller through an amendment to the Service Agreement.

**23.3 Information on Assignment or Transfer of Service:**

In accordance with Section 4, all sales or assignments of capacity must be conducted through or otherwise posted on the Transmission Provider's OASIS on or before the date the reassigned service commences and are subject to Section 23.1. Resellers

may also use the Transmission Provider's OASIS to post transmission capacity available for resale.

## **24 Metering and Power Factor Correction at Receipt and Delivery Point(s)**

### **24.1 Transmission Customer Obligations:**

Unless otherwise agreed, the Transmission Customer shall be responsible for installing and maintaining compatible metering and communications equipment to accurately account for the capacity and energy being transmitted under Part II of the Tariff and to communicate the information to the Transmission Provider. Such equipment shall remain the property of the Transmission Customer.

### **24.2 Transmission Provider Access to Metering Data:**

The Transmission Provider shall have access to metering data, which may reasonably be required to facilitate measurements and billing under the Service Agreement.

### **24.3 Power Factor:**

Unless otherwise agreed, the Transmission Customer is required to maintain a power factor within the same range as the Transmission Provider pursuant to Good Utility Practices. The power factor requirements are specified in the Service Agreement where applicable.

## **25 Compensation for Transmission Service**

Rates for Firm and Non-Firm Point-To-Point Transmission Service are provided in the Schedules appended to the Tariff: Firm Point-To-Point Transmission Service (Schedule 7); and Non-Firm Point-To-Point Transmission Service (Schedule 8). The Transmission Provider shall use Part II of the Tariff to make its Third-Party Sales. The

Transmission Provider shall account for such use at the applicable Tariff rates, pursuant to Section 8.

## **26 Stranded Cost Recovery**

The Transmission Provider may seek to recover stranded costs from the Transmission Customer pursuant to this Tariff and pursuant to Section 7 of the Northwest Power Act.

## **27 Compensation for New Facilities and Redispatch Costs**

Whenever a System Impact Study performed by the Transmission Provider in connection with the provision of Firm Point-To-Point Transmission Service identifies the need for new facilities, the Transmission Customer shall be responsible for such costs to the extent consistent with Commission policy. Whenever a System Impact Study performed by the Transmission Provider identifies capacity constraints that may be relieved by redispatching the Transmission Provider's resources to eliminate such constraints, the Transmission Customer shall be responsible for the redispatch costs to the extent consistent with Commission policy.

### **III. NETWORK INTEGRATION TRANSMISSION SERVICE**

#### **Preamble**

The Transmission Provider will provide Network Integration Transmission Service pursuant to the applicable terms and conditions contained in the Tariff and Service Agreement. Network Integration Transmission Service allows the Network Customer to integrate, economically dispatch and regulate its current and planned Network Resources to serve its Network Load in a manner comparable to that in which the Transmission Provider utilizes its Transmission System to serve its Native Load Customers. Network Integration Transmission



Service also may be used by the Network Customer to deliver economy energy purchases to its Network Load from non-designated resources on an as-available basis without additional charge. Transmission service for sales to non-designated loads will be provided pursuant to the applicable terms and conditions of Part II of the Tariff. If and to the extent that the Transmission Provider has established separate rates for Transmission Service over one or more intertie segments, Network Integration Transmission Service will not be available over such intertie segments, and the terms and conditions for Transmission Service over such intertie segments will be provided under Part II of this Tariff.

## **28 Nature of Network Integration Transmission Service**

### **28.1 Scope of Service:**

Network Integration Transmission Service is a transmission service that allows Network Customers to efficiently and economically utilize their Network Resources (as well as other non-designated generation resources) to serve their Network Load located in the Transmission Provider's Control Area and any additional load that may be designated pursuant to Section 31.3 of the Tariff. The Network Customer taking Network Integration Transmission Service must obtain or provide Ancillary Services pursuant to Section 3, and must comply with the requirements of Attachment Q regarding the EIM.

### **28.2 Transmission Provider Responsibilities:**

The Transmission Provider will plan, construct, operate and maintain its Transmission System in accordance with Good Utility Practice and its planning obligations in Attachment K in order to provide the Network Customer with Network Integration Transmission Service over the Transmission Provider's Transmission System. The Transmission Provider, on behalf of its Native Load

Customers, shall be required to designate resources and loads in the same manner as any Network Customer under Part III of this Tariff. This information must be consistent with the information used by the Transmission Provider to calculate available transfer capability. The Transmission Provider shall include the Network Customer's Network Load in its Transmission System planning and shall, consistent with Good Utility Practice and Attachment K, endeavor to construct and place into service sufficient transfer capability to deliver the Network Customer's Network Resources to serve its Network Load on a basis comparable to the Transmission Provider's delivery of its own generating and purchased resources to its Native Load Customers.

### **28.3 Network Integration Transmission Service:**

The Transmission Provider will provide firm transmission service over its Transmission System to the Network Customer for the delivery of capacity and energy from its designated Network Resources to service its Network Loads on a basis that is comparable to the Transmission Provider's use of the Transmission System to reliably serve its Native Load Customers.

### **28.4 Secondary Service:**

The Network Customer may use the Transmission Provider's Transmission System to deliver energy to its Network Loads from resources that have not been designated as Network Resources. Such energy shall be transmitted, on an as-available basis, at no additional charge. Secondary service shall not require the filing of an Application for Network Integration Transmission Service under the Tariff. However, all other requirements of Part III of the Tariff (except for transmission rates) shall apply to secondary service. Deliveries from resources other than Network Resources will

have a higher priority than any Non-Firm Point-To-Point Transmission Service under Part II of the Tariff.

**28.5 Real Power Losses:**

Real Power Losses are associated with all transmission service. The Transmission Provider is not obligated to provide Real Power Losses. The Network Customer is responsible for replacing losses associated with all transmission service as calculated by the Transmission Provider. The applicable loss factors are listed under Schedule 11.

**28.6 Restrictions on Use of Service:**

The Network Customer shall not use Network Integration Transmission Service for (i) sales of capacity and energy to non-designated loads, or (ii) direct or indirect provision of transmission service by the Network Customer to third parties. All Network Customers taking Network Integration Transmission Service shall use Point-To-Point Transmission Service under Part II of the Tariff for any Third-Party Sale which requires use of the Transmission Provider's Transmission System. The Transmission Provider shall specify any appropriate charges and penalties and all related terms and conditions applicable in the event that a Network Customer uses Network Integration Transmission Service or secondary service pursuant to Section 28.4 to facilitate a wholesale sale that does not serve a Network Load.

**28.7 Participation in the EIM:**

Notwithstanding the limitations in Section 28.6, Network Customers may participate in the EIM utilizing a Network Integration Transmission Service Agreement without a requirement to terminate the designation of any Network Resource that is a BPA EIM Participating Resource consistent with Section 30.3 of this Tariff and without a

requirement to reserve additional Point-To-Point Transmission Service for such transactions.

## **29 Initiating Service**

### **29.1 Condition Precedent for Receiving Service:**

Subject to the terms and conditions of Part III of the Tariff, the Transmission Provider will provide Network Integration Transmission Service to any Eligible Customer, provided that (i) the Eligible Customer completes an Application for service as provided under Part III of the Tariff, (ii) the Eligible Customer and the Transmission Provider complete the technical arrangements set forth in Sections 29.3 and 29.4, (iii) the Eligible Customer executes a Service Agreement pursuant to Attachment F for service under Part III of the Tariff or requests in writing that the Transmission Provider begin to initiate service in the absence of an executed Service Agreement pursuant to Section 15.3, and (iv) the Eligible Customer executes a Network Operating Agreement with the Transmission Provider pursuant to Attachment G.

### **29.2 Application Procedures:**

An Eligible Customer requesting service under Part III of the Tariff must submit (i) an Application, with a deposit approximating the charge for one month of service, to the Transmission Provider as far as possible in advance of the month in which service is to commence; and (ii) a non-refundable processing fee. The deposit and non-refundable processing fee are not required for a Network Customer's Application to designate new Network Resources. Deposits shall be made either to the Transmission Provider, which deposit shall not earn interest, or into an escrow fund set up by the Transmission Customer. Unless subject to the procedures in

Section 2, Completed Applications for Network Integration Transmission Service will be assigned a priority according to the date and time the Application is received on OASIS, with the earliest Application receiving the highest priority. Applications should be submitted by entering the information listed below on the Transmission Provider's OASIS. Until OASIS can accept all such information, any required information that OASIS cannot accept may be submitted by transmitting the required information to the Transmission Provider by telefax or by United States mail or other recognized delivery service. In appropriate cases, the Transmission Provider will accept all information by such means. In such cases, the Transmission Provider will post the request on OASIS. A Completed Application shall provide all of the information included in 18 C.F.R § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the party requesting service;
- (ii) A statement that the party requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) A description of the Network Load at each delivery point. This description should separately identify and provide the Eligible Customer's best estimate of the total loads to be served at each transmission voltage level, and the loads to be served from each Transmission Provider substation at the same transmission voltage level. The description should include a ten (10) year forecast of summer and winter load and resource requirements beginning with the first year after the service is scheduled to commence;

- (iv) The amount and location of any interruptible loads included in the Network Load. This shall include the summer and winter capacity requirements for each interruptible load (had such load not been interruptible), that portion of the load subject to interruption, the conditions under which an interruption can be implemented and any limitations on the amount and frequency of interruptions. An Eligible Customer should identify the amount of interruptible customer load (if any) included in the 10 year load forecast provided in response to (iii) above;
- (v) A description of Network Resources (current and 10-year projection). For each on-system Network Resource, such description shall include:
- Unit size and amount of capacity from that unit to be designated as Network Resource
  - VAR capability (both leading and lagging) of all generators
  - Operating restrictions
    - Any periods of restricted operations throughout the year
    - Maintenance schedules
    - Minimum loading level of unit
    - Normal operating level of unit
    - Any must-run unit designations required for system reliability or contract reasons
  - Approximate variable generating cost (\$/MWH) for redispatch computations

- Arrangements governing sale and delivery of power to third parties from generating facilities located in the Transmission Provider Control Area, where only a portion of unit output is designated as a Network Resource

For each off-system Network Resource, such description shall include:

- Identification of the Network Resource as an off-system resource
- Amount of power to which the customer has rights
- Identification of the control area from which the power will originate.
- Delivery point(s) to the Transmission Provider's Transmission System
- Transmission arrangements on the external transmission system(s)
- Operating restrictions, if any
  - Any periods of restricted operations throughout the year
  - Maintenance schedules
  - Minimum loading level of unit
  - Normal operating level of unit
  - Any must-run unit designations required for system reliability or contract reasons
- Approximate variable generating cost (\$/MWH) for redispatch computations;

(vi) Description of Eligible Customer's transmission system:

- Load flow and stability data, such as real and reactive parts of the load, lines, transformers, reactive devices and load type, including normal and emergency ratings of all transmission equipment in a load flow format compatible with that used by the Transmission Provider
  - Operating restrictions needed for reliability
  - Operating guides employed by system operators
  - Contractual restrictions or committed uses of the Eligible Customer's transmission system, other than the Eligible Customer's Network Loads and Resources
  - Location of Network Resources described in subsection (v) above
  - 10 year projection of system expansions or upgrades
  - Transmission System maps that include any proposed expansions or upgrades
  - Thermal ratings of Eligible Customer's Control Area ties with other Control Areas;
- (vii) Service Commencement Date and the term of the requested Network Integration Transmission Service. The minimum term for Network Integration Transmission Service is one year;
- (viii) A statement signed by an authorized officer from or agent of the Network Customer attesting that all of the network resources listed pursuant to Section 29.2(v) satisfy the following conditions:



- (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff; and (2) the Network Resources do not include any resources, or any portion thereof, that are committed for a sale of one-year or more to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program;
- (ix) Any additional information required of the Transmission Customer as specified in (1) the Transmission Provider's planning process established in Attachment K or (2) Attachment Q; and
  - (x) A statement of which Ancillary Services the Eligible Customer will purchase from the Transmission Provider.

Unless the Parties agree to a different time frame, the Transmission Provider must acknowledge the request within ten (10) days of receipt. The acknowledgement must include a date by which a response, including a Service Agreement, will be sent to the Eligible Customer. If an Application fails to meet the requirements of this section, the Transmission Provider shall notify the Eligible Customer requesting service within fifteen (15) days of receipt and specify the reasons for such failure. Wherever possible, the Transmission Provider will attempt to remedy deficiencies in the Application through informal communications with the Eligible Customer. If

such efforts are unsuccessful, the Transmission Provider shall return the Application without prejudice to the Eligible Customer filing a new or revised Application that fully complies with the requirements of this section. The Eligible Customer will be assigned a new priority consistent with the date of the new or revised Application. The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

**29.3 Technical Arrangements to be Completed Prior to Commencement of Service:**

Network Integration Transmission Service shall not commence until the Transmission Provider and the Network Customer, or a third party, have completed installation of all equipment specified under the Network Operating Agreement consistent with Good Utility Practice and any additional requirements reasonably and consistently imposed to ensure the reliable operation of the Transmission System. The Transmission Provider shall exercise reasonable efforts, in coordination with the Network Customer, to complete such arrangements as soon as practicable taking into consideration the Service Commencement Date.

**29.4 Network Customer Facilities:**

The provision of Network Integration Transmission Service shall be conditioned upon the Network Customer's constructing, maintaining and operating the facilities on its side of each delivery point or interconnection necessary to reliably deliver capacity and energy from the Transmission Provider's Transmission System to the Network Customer. The Network Customer shall be solely responsible for constructing or installing all facilities on the Network Customer's side of each such delivery point or interconnection.

**29.5 Filing of Service Agreement: (Intentionally omitted.)****29.6 Tender and Execution of Service Agreement Where Environmental Review is Required:**

In the event that environmental review associated with a request is required, the Transmission Provider shall tender a Service Agreement as soon as possible after the completion of any necessary environmental review and development of any necessary environmental mitigation requirements. Failure of an Eligible Customer to execute and return the Service Agreement within fifteen (15) days after it is tendered by the Transmission Provider will be deemed a withdrawal and termination of the Application and any deposit submitted shall be returned, without interest, or the release of its escrow funds authorized. Nothing herein limits the right of an Eligible Customer to file another Application after such withdrawal and termination.

**30 Network Resources****30.1 Designation of Network Resources:**

Network Resources shall include all generation owned, purchased or leased by the Network Customer designated to serve Network Load under the Tariff. Network Resources may not include resources, or any portion thereof, that are committed for a sale of one year or more to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program or participating in the EIM in accordance with Attachment Q. Any owned or purchased resources that were serving the Network Customer's loads under firm agreements entered into on or before the Service Commencement Date shall initially be

designated as Network Resources until the Network Customer terminates the designation of such resources.

### **30.2 Designation of New Network Resources:**

The Network Customer may designate a new Network Resource by providing the Transmission Provider with as much advance notice as practicable. A designation of a new Network Resource must be made through the Transmission Provider's OASIS by a request for modification of service pursuant to an Application under Section 29. This request must include a statement that the new network resource satisfies the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff; and (2) The Network Resources do not include any resources, or any portion thereof, that are committed for a sale of one year or more to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. The Network Customer's request will be deemed deficient if it does not include this statement and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff.

### **30.3 Termination of Network Resources:**

The Network Customer may terminate the designation of all or part of a generating resource as a Network Resource by providing notification to the Transmission Provider through OASIS as soon as reasonably practicable, but not later than the firm scheduling deadline for the period of termination. Any request for termination

of Network Resource status must be submitted on OASIS, and should indicate whether the request is for indefinite or temporary termination. A request for indefinite termination of Network Resource status must indicate the date and time that the termination is to be effective, and the identification and capacity of the resource(s) or portions thereof to be indefinitely terminated. A request for temporary termination of Network Resource status must include the following:

- (i) Effective date and time of temporary termination;
- (ii) Effective date and time of redesignation, following period of temporary termination;
- (iii) Identification and capacity of resource(s) or portions thereof to be temporarily terminated;
- (iv) Resource description and attestation for redesignating the network resource following the temporary termination, in accordance with Section 30.2; and
- (v) Identification of any related transmission service requests to be evaluated concomitantly with the request for temporary termination, such that the requests for undesignation and the request for these related transmission service requests must be approved or denied as a single request. The evaluation of these related transmission service requests must take into account the termination of the network resources identified in (iii) above, as well as all competing transmission service requests of higher priority.

As part of a temporary termination, a Network Customer may only redesignate the same resource that was originally designated, or a portion thereof. Requests to

redesignate a different resource and/or a resource with increased capacity will be deemed deficient and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff.

#### **30.4 Operation of Network Resources:**

The Network Customer shall not operate its designated Network Resources located in the Network Customer's or Transmission Provider's Control Area such that the output of those facilities exceeds its designated Network Load, plus sales of less than one year delivered pursuant to Part II of the Tariff, plus losses, plus power sales under a reserve sharing program, plus sales that permit curtailment without penalty to serve its designated Network Load. This limitation shall not apply to BPA EIM Participating Resources responding to Dispatch Instructions or to changes in the operation of a Transmission Customer's Network Resources at the request of the Transmission Provider to respond to an emergency or other unforeseen condition which may impair or degrade the reliability of the Transmission System. For all Network Resources not physically connected with the Transmission Provider's Transmission System, the Network Customer may not schedule delivery of energy in excess of the Network Resource's capacity, as specified in the Network Customer's Application pursuant to Section 29, unless the Network Customer supports such delivery within the Transmission Provider's Transmission System by either obtaining Point-To-Point Transmission Service or utilizing secondary service pursuant to Section 28.4. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that a Network Customer's schedule at the delivery point for a Network Resource not physically interconnected with the Transmission Provider's Transmission System exceeds the

Network Resource's designated capacity, excluding energy delivered using secondary service or Point-to-Point Transmission Service.

**30.5 Network Customer Redispatch Obligation:**

As a condition to receiving Network Integration Transmission Service, the Network Customer agrees to redispatch its Network Resources as requested by the Transmission Provider pursuant to Section 33.2. To the extent practical and at its discretion, the Transmission Provider may redispatch available Federal Columbia River Power System resources or Network Resources on a least cost, non-discriminatory basis between all Network Customers, and the Transmission Provider.

**30.6 Transmission Arrangements for Network Resources Not Physically Interconnected With The Transmission Provider:**

The Network Customer shall be responsible for any arrangements necessary to deliver capacity and energy from a Network Resource not physically interconnected with the Transmission Provider's Transmission System. The Transmission Provider will undertake reasonable efforts to assist the Network Customer in obtaining such arrangements, including without limitation, providing any information or data required by such other entity pursuant to Good Utility Practice.

**30.7 Limitation on Designation of Network Resources:**

The Network Customer must demonstrate that it owns or has committed to purchase generation pursuant to an executed contract in order to designate a generating resource as a Network Resource. Alternatively, the Network Customer may establish that execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff.

**30.8 Use of Interface Capacity by the Network Customer:**

There is no limitation upon a Network Customer's use of the Transmission Provider's Transmission System at any particular interface to integrate the Network Customer's Network Resources (or substitute economy purchases) with its Network Loads.

However, a Network Customer's use of the Transmission Provider's total interface capacity with other transmission systems may not exceed the Network Customer's Load.

**30.9 Network Customer Owned Transmission Facilities: (Intentionally omitted.)****31 Designation of Network Load****31.1 Network Load:**

The Network Customer must designate the individual Network Loads on whose behalf the Transmission Provider will provide Network Integration Transmission Service. The Network Loads shall be specified in the Service Agreement.

**31.2 New Network Loads Connected With the Transmission Provider:**

The Network Customer shall provide the Transmission Provider with as much advance notice as reasonably practicable of the designation of new Network Load that will be added to its Transmission System. A designation of new Network Load must be made through a modification of service pursuant to a new Application. The Transmission Provider will use due diligence to install any transmission facilities required to interconnect a new Network Load designated by the Network Customer. The costs of new facilities required to interconnect a new Network Load shall be determined in accordance with the procedures provided in Section 32.4 and shall be charged to the Network Customer as provided for in the rates determined pursuant to Section 7 of the Northwest Power Act.



**31.3 Network Load Not Physically Interconnected with the Transmission Provider:**

This section applies to both initial designation pursuant to Section 31.1 and the subsequent addition of new Network Load not physically interconnected with the Transmission Provider. To the extent that the Network Customer desires to obtain transmission service for a load outside the Transmission Provider's Transmission System, the Network Customer shall have the option of (1) electing to include the entire load as Network Load for all purposes under Part III of the Tariff and designating Network Resources in connection with such additional Network Load, or (2) excluding that entire load from its Network Load and purchasing Point-To-Point Transmission Service under Part II of the Tariff. To the extent that the Network Customer gives notice of its intent to add a new Network Load as part of its Network Load pursuant to this section the request must be made through a modification of service pursuant to a new Application.

**31.4 New Interconnection Points:**

To the extent the Network Customer desires to add a new Delivery Point or interconnection point between the Transmission Provider's Transmission System and a Network Load, the Network Customer shall provide the Transmission Provider with as much advance notice as reasonably practicable.

**31.5 Changes in Service Requests:**

Under no circumstances shall the Network Customer's decision to cancel or delay a requested change in Network Integration Transmission Service (e.g. the addition of a new Network Resource or designation of a new Network Load) in any way relieve the Network Customer of its obligation to pay the costs of transmission facilities

constructed by the Transmission Provider and charged to the Network Customer as reflected in the Service Agreement. However, the Transmission Provider must treat any requested change in Network Integration Transmission Service in a non-discriminatory manner.

### **31.6 Annual Load and Resource Information Updates:**

The Network Customer shall provide the Transmission Provider with annual updates of Network Load and Network Resource forecasts consistent with those included in its Application for Network Integration Transmission Service under Part III of the Tariff including, but not limited to, any information provided under Section 29.2(ix) pursuant to the Transmission Provider's planning process in Attachment K. The Network Customer also shall provide the Transmission Provider with timely written notice of material changes in any other information provided in its Application relating to the Network Customer's Network Load, Network Resources, its transmission system or other aspects of its facilities or operations affecting the Transmission Provider's ability to provide reliable service.

## **32 Additional Study Procedures For Network Integration Transmission Service Requests**

### **32.1 Notice of Need for System Impact Study:**

After receiving a request for service, the Transmission Provider shall determine on a non-discriminatory basis whether a System Impact Study is needed and whether the Transmission Provider will study the impact of the request in a Cluster Study. A description of the Transmission Provider's methodology for completing a System Impact Study is provided in Attachment D. If the Transmission Provider determines that a System Impact Study is necessary to accommodate the requested service, it

shall so inform the Eligible Customer, as soon as practicable, and shall inform the Eligible Customer whether the Transmission Provider will study the impact of the service request in a Cluster Study. If the Transmission Provider notifies the Eligible Customer that a System Impact Study is needed to evaluate the impact of the Application and that the Transmission Provider will perform a Cluster Study pursuant to Section 32.6 to evaluate such impact, the Eligible Customer may, at any time prior to the posting of the OASIS notice described in Section 32.6(i), request in writing that the Transmission Provider study the Application individually rather than in a Cluster Study, and the Transmission Provider will offer the Eligible Customer a System Impact Study Agreement pursuant to this Section and will otherwise process the Application on an individual basis.

If (i) the Transmission Provider notifies the Eligible Customer that it will be studying the service request individually rather than in a Cluster Study, or (ii) the Eligible Customer requests in writing to be studied individually, the Transmission Provider shall as soon as practicable, but no later than thirty (30) days from the notification under (i) or receipt of the written request under (ii), tender a System Impact Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required System Impact Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the System Impact Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the System Impact Study Agreement, its Application shall be deemed withdrawn and its

deposit shall be returned, without interest, or the release of its escrow funds authorized.

### **32.1.1 Notice of Need for Environmental Review**

If the Transmission Provider determines that environmental review is required in response to a request for service, the Transmission Provider shall tender an environmental review agreement as soon as practicable. Pursuant to such agreement the Eligible Customer shall agree to reimburse the Transmission Provider for performing the environmental review. The Eligible Customer shall execute and return the environmental review agreement within 30 days of receipt or its application shall be deemed withdrawn and its deposit, if any, pursuant to Section 29.2, shall be returned, without interest, or the release of its escrow funds authorized.

### **32.2 System Impact Study Agreement and Cost Reimbursement:**

- (i) The System Impact Study Agreement will clearly specify the Transmission Provider's estimate of the actual cost, and time for completion of the System Impact Study. The charge shall not exceed the actual cost of the study. In performing the System Impact Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. The Eligible Customer will not be assessed a charge for such existing studies; however, the Eligible Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the Eligible Customer's request for service on the Transmission System.

- (ii) If in response to multiple Eligible Customers requesting service in relation to the same competitive solicitation, a single System Impact Study is sufficient for the Transmission Provider to accommodate the service requests, the costs of that study shall be pro-rated among the Eligible Customers.
- (iii) For System Impact Studies that the Transmission Provider conducts on its own behalf, the Transmission Provider shall record the cost of the System Impact Studies pursuant to Section 8.

### **32.3 System Impact Study Procedures:**

Upon receipt of an executed System Impact Study Agreement, the Transmission Provider will use due diligence to complete the required System Impact Study within a sixty (60) day period. The System Impact Study shall identify (1) any system constraints, identified with specificity by transmission element or flowgate, (2) redispatch options (when requested by an Eligible Customer) including, to the extent possible, an estimate of the cost of redispatch, (3) available options for installation of automatic devices to curtail service (when requested by an Eligible Customer), and (4) additional Direct Assignment Facilities or Network Upgrades required to provide the requested service. For customers requesting the study of redispatch options, the System Impact Study shall (1) identify all resources located within the Transmission Provider's Control Area that can significantly contribute toward relieving the system constraint and (2) provide a measurement of each resource's impact on the system constraint. If the Transmission Provider possesses information indicating that any resource outside its Control Area could relieve the constraint, it shall identify each such resource in the System Impact Study. In the event that the Transmission

Provider is unable to complete the required System Impact Study within such time period, it shall so notify the Eligible Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. A copy of the completed System Impact Study and related work papers shall be made available to the Eligible Customer as soon as the System Impact Study is complete. The Transmission Provider will use the same due diligence in completing the System Impact Study for an Eligible Customer as it uses when completing studies for itself. The Transmission Provider shall notify the Eligible Customer immediately upon completion of the System Impact Study if the Transmission System will be adequate to accommodate all or part of a request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. Except as provided in Section 29.6, in order for a request to remain a Completed Application, within fifteen (15) days of completion of the System Impact Study the Eligible Customer must execute a Service Agreement or request resolution of unacceptable terms and conditions under Section 12 of the Tariff, or the Application shall be deemed terminated and withdrawn.

#### **32.4 Facilities Study Procedures:**

If a System Impact Study indicates that additions or upgrades to the Transmission System are needed to supply the Eligible Customer's service request, the Transmission Provider, within thirty (30) days of the completion of the System Impact Study, shall tender to the Eligible Customer a Facilities Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for performing the required Facilities Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the Facilities Study

Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the Facilities Study Agreement, its Application shall be deemed withdrawn and its deposit shall be returned, without interest, or the release of its escrow funds authorized. Upon receipt of an executed Facilities Study Agreement, the Transmission Provider will use due diligence to complete the required Facilities Study within a sixty (60) day period. If the Transmission Provider is unable to complete the Facilities Study in the allotted time period, the Transmission Provider shall notify the Eligible Customer and provide an estimate of the time needed to reach a final determination along with an explanation of the reasons that additional time is required to complete the study. When completed, the Facilities Study will include a good faith estimate of (i) the cost of Direct Assignment Facilities to be charged to the Eligible Customer, (ii) the Eligible Customer's appropriate share of the cost of any required Network Upgrades, and (iii) the time required to complete such construction and initiate the requested service. The Eligible Customer shall provide the Transmission Provider with a letter of credit or other reasonable form of security acceptable to the Transmission Provider equivalent to the costs of new facilities or upgrades consistent with commercial practices as established by the Uniform Commercial Code. Except as provided in Section 29.6, the Eligible Customer shall have thirty (30) days to execute a Service Agreement or request resolution of unacceptable terms and conditions under Section 12 of the Tariff and provide the required letter of credit or other form of security or the request no longer will be a Completed Application and shall be deemed terminated and withdrawn.

**32.5 Study Metrics:**

Section 19.9 defines how to calculate the percentage of non-Affiliates' System Impact Studies, Facilities Studies, and Cluster Studies processed outside the study completion due diligence deadlines under Part II of the Tariff. The same calculation applies to service under Part III of the Tariff.

**32.6 Cluster Study:****(i) Cluster Study Procedures**

The Transmission Provider may conduct a Cluster Study on its own initiative or in response to a written request by Eligible Customer(s) with pending service request(s). If Eligible Customer(s) request a Cluster Study, the Transmission Provider will determine, in its discretion, if it can reasonably accommodate the request(s) and will notify such Eligible Customers of its decision. If the Transmission Provider decides to conduct a Cluster Study, it will post notice of its decision on OASIS, and will provide reasonable advance notification to Eligible Customers, including the eligibility of Applications for the Cluster Study, the timing and process for conducting the study, the reasons for the Cluster Study, and whether the Transmission Provider will require a Precedent Transmission Service Agreement. For purposes of a Cluster Study, the Transmission Provider may aggregate: (1) all Applications that are submitted within a set time period, including Applications that were submitted before the Transmission Provider notified Eligible Customers that it will perform a Cluster Study, (2) all requests for service over a particular transmission path, (3) all requests for service of at least a certain amount of capacity, or (4) all requests that the Transmission Provider determines are suitable for aggregation based on other appropriate criteria, including a combination of criteria.



The Transmission Provider will require Eligible Customers with service request(s) that the Transmission Provider identifies for a Cluster Study to sign Cluster Study agreements or Precedent Transmission Service Agreements that provide that the System Impact Study, Facilities Study, or environmental review for the service request(s) will be performed as a Cluster Study. With respect to a clustered System Impact Study or Facilities Study, the study will be performed in accordance with the procedures set forth in Section 32.3 and 32.4 with the exception that the timeline for performing the System Impact Study or Facilities Study will begin to run after the last date for any Eligible Customer with service request(s) that the Transmission Provider identifies for the Cluster Study to sign and return Cluster Study Agreements or Precedent Transmission Services Agreements. With respect to a Cluster Study that includes aggregate study of system impacts and needed facilities, the Transmission Provider will initiate the Cluster Study within 14 days of the later of (i) the due date for the Precedent Transmission Service Agreement (PTSA) or (ii) the due date for providing performance assurance as required by the PTSA. The Transmission Provider will use due diligence to complete the Cluster Study within 120 days from such date. If the Transmission Provider is unable to complete the Cluster Study within the applicable timeline, the Transmission Provider will notify the Eligible Customers in the Cluster Study and provide an estimate of the time needed to complete the study along with an explanation of the reasons that additional time is required.

(ii) Cluster Study Agreement

The Transmission Provider will require Eligible Customers with service request(s) that the Transmission Provider identifies for a Cluster Study to sign Cluster Study agreements for the service request(s) unless the Transmission Provider requires such Eligible customers to sign Precedent Transmission Service Agreements for the service request(s) under Section 32.6(iii). The Transmission Provider may conduct a Cluster Study for which the Transmission Provider requires Eligible Customers to sign Cluster Study agreements when: (1) preliminary analysis indicates that constructing new facilities or upgrades that the study identifies would facilitate providing service to multiple pending service requests; (2) preliminary analysis indicates that the Cluster Study would benefit the integration of new renewable resources; (3) at least one Eligible Customer requests that the Transmission Provider perform a Cluster Study pursuant to Section 32.6(i); or (4) the Transmission Provider determines based on other appropriate criteria that conducting a Cluster Study will facilitate providing service.

The Cluster Study agreement will describe the scope of the Cluster Study. An Eligible Customer must sign and return the Cluster Study agreement within 15 days of receipt. If an Eligible Customer fails to sign and return the Cluster Study agreement by the deadline stated in this paragraph or to advance fund the study costs, the Eligible Customer's service request(s) will be deemed withdrawn, the Transmission Provider will give the request(s) no further consideration, and the Eligible Customer's deposit provided pursuant to Section 29.2 will be returned, without interest, or the release of its escrow funds authorized.

A Cluster Study agreement will include the Transmission Provider's good faith estimate of the actual study costs and will require each Eligible Customer with service request(s) in the Cluster Study to advance fund a percentage of the study costs equal to the megawatts of the Eligible Customer's service request(s) divided by the total number of megawatts of all service requests included in the Cluster Study. Upon completing the Cluster Study, the Transmission Provider will determine the actual study costs. If the aggregate amount of the advance funding differs from the actual costs of the Cluster Study, the Transmission Provider will request additional funds from, or refund the excess amount to, the Eligible Customers with service request(s) in the Cluster Study, in proportion to the amounts previously advanced by each Eligible Customer. Eligible Customers must advance additional funds requested, if any, within 30 days of the request.

An Eligible Customer that has signed a Cluster Study agreement may opt out of a Cluster Study by withdrawing its service request(s) on OASIS. An Eligible Customer that withdraws service request(s) on OASIS after signing a Cluster Study agreement will remain liable for its percentage of the study costs and will be liable for any costs of re-study or analysis that result from the Eligible Customer opting out.

(iii) Precedent Transmission Service Agreement

The Transmission Provider may require Eligible Customers with service request(s) that the Transmission Provider identifies for a Cluster Study to sign Precedent Transmission Service Agreements for the service request(s). The Transmission Provider will bear the costs of a Cluster Study for service requests for which Eligible

Customers sign Precedent Transmission Service Agreements, and the Transmission Provider will not require Eligible Customers to also sign Cluster Study agreements for such a study.

The Precedent Transmission Service Agreements will obligate the Eligible Customers to take transmission service at the Base Charge in the Transmission Provider's Network Integration rate schedule if the Transmission Provider satisfies conditions in the agreement that will include, but will not necessarily be limited to (1) determining in its discretion that it may reasonably provide transmission service at such rate, after considering, without limitation, the amount of subscription under Precedent Transmission Service Agreements and the benefits to the Transmission System of any new facilities needed to provide service to the service requests in the Cluster Study, and (2) in the event that the Transmission Provider must construct new facilities or facility upgrades to provide the requested service, the Transmission Provider decides, after completing environmental review, to build such facilities. The Transmission Provider will provide Eligible Customers at least fifteen (15) days to sign and return the Precedent Transmission Service Agreements. If an Eligible Customer fails to sign and return the Precedent Transmission Service Agreement by the deadline that the Transmission Provider establishes or to meet any requirement specified in such agreement, the Eligible Customer's service request(s) will be deemed withdrawn, the Transmission Provider will give the service request(s) no further consideration, and the Eligible Customer's deposit provided pursuant to Section 29.2 will be returned, without interest, or the release of its escrow funds authorized.

An Eligible Customer that signs a Precedent Transmission Service Agreement will provide security equivalent to the charges for twelve months of service for the Eligible Customer's service request(s), except that the Eligible Customer will not provide security if the Eligible Customer has a Network Integration Transmission Service Agreement, the service request for which the Eligible Customer signs a Precedent Transmission Service Agreement is for transmission of a new Network Resource, and the Eligible Customer submits a statement signed by an authorized officer or agent of the Eligible Customer attesting that (1) the Eligible Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff; and (2) the Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Eligible Customer's Network Load on a non-interruptible basis. A security deposit provided pursuant to this paragraph will be made either (1) to the Transmission Provider (which shall not earn interest), or (2) into an escrow fund set up by the Transmission Customer consistent with the provisions of the Precedent Transmission Service Agreement.

The Transmission Provider will provide Eligible Customers that are offered a Precedent Transmission Service Agreement the option under such agreement to extend the term of service initially requested by the customers without filing a new Application. An extension of the term of service pursuant to this paragraph will not be subject to competition under Section 2.2.

### **33 Load Shedding and Curtailments**

#### **33.1 Procedures:**

Prior to the Service Commencement Date, the Transmission Provider and the Network Customer shall establish Load Shedding and Curtailment procedures pursuant to the Network Operating Agreement with the objective of responding to contingencies on the Transmission System and on systems directly and indirectly interconnected with Transmission Provider's Transmission System. The Parties will implement such programs during any period when the Transmission Provider determines that a system contingency exists and such procedures are necessary to alleviate such contingency. The Transmission Provider will notify all affected Network Customers in a timely manner of any scheduled Curtailment.

#### **33.2 Transmission Constraints:**

During any period when the Transmission Provider determines that a transmission constraint exists on the Transmission System, and such constraint may impair the reliability of the Transmission Provider's system, the Transmission Provider will take whatever actions, consistent with Good Utility Practice, that are reasonably necessary to maintain the reliability of the Transmission Provider's system. To the extent the Transmission Provider determines that the reliability of the Transmission System can be maintained by redispatching resources, the Transmission Provider may redispatch available Federal Columbia River Power System resources or it may initiate procedures pursuant to the Network Operating Agreement to redispatch all Network Resources and the Transmission Provider's own resources on a least-cost basis without regard to the ownership of such resources. Any redispatch of Network Resources under this section may not unduly discriminate between the Transmission

Provider's use of the Transmission System on behalf of its Native Load Customers and any Network Customer's use of the Transmission System to serve its designated Network Load.

**33.3 Cost Responsibility for Relieving Transmission Constraints:**

Whenever the Transmission Provider implements redispatch of available Federal Columbia River Power System resources or least-cost redispatch procedures of Network Resources in response to a transmission constraint, the Transmission Provider and Network Customers will each bear a proportionate share of the total redispatch cost based on their respective Network Load.

**33.4 Curtailments of Scheduled Deliveries:**

If a transmission constraint on the Transmission Provider's Transmission System cannot be relieved through the implementation of least-cost redispatch procedures and the Transmission Provider determines that it is necessary to Curtail scheduled deliveries, the Parties shall Curtail such schedules in accordance with the Network Operating Agreement or pursuant to the Procedures Addressing Parallel Flows specified in Attachment J.

**33.5 Allocation of Curtailments:**

The Transmission Provider shall, on a non-discriminatory basis, Curtail the transaction(s) that effectively relieve the constraint. However, to the extent practicable and consistent with Good Utility Practice, any Curtailment will be shared

by the Transmission Provider and Network Customer in proportion to their respective Network Load.

The Transmission Provider shall not direct the Network Customer to Curtail schedules to an extent greater than the Transmission Provider would Curtail the Transmission Provider's schedules under similar circumstances.

### **33.6 Load Shedding:**

To the extent that a system contingency exists on the Transmission Provider's Transmission System and the Transmission Provider determines that it is necessary for the Transmission Provider and the Network Customer to shed load, the Parties shall shed load in accordance with previously established procedures under the Network Operating Agreement.

### **33.7 System Reliability:**

Notwithstanding any other provisions of this Tariff, the Transmission Provider reserves the right, consistent with Good Utility Practice and on a not unduly discriminatory basis, to Curtail Network Integration Transmission Service without liability on the Transmission Provider's part for the purpose of making necessary adjustments to, changes in, or repairs on its lines, substations and facilities, and in cases where the continuance of Network Integration Transmission Service would endanger persons or property. In the event of any adverse condition(s) or disturbance(s) on the Transmission Provider's Transmission System or on any other system(s) directly or indirectly interconnected with the Transmission Provider's Transmission System, the Transmission Provider, consistent with Good Utility Practice, also may Curtail Network Integration Transmission Service in order to (i) limit the extent or damage of the adverse condition(s) or disturbance(s), (ii) prevent



damage to generating or transmission facilities, or (iii) expedite restoration of service. The Transmission Provider will give the Network Customer as much advance notice as is practicable in the event of such Curtailment. Any Curtailment of Network Integration Transmission Service will be not unduly discriminatory relative to the Transmission Provider's use of the Transmission System on behalf of its Native Load Customers. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that the Network Customer fails to respond to established Load Shedding and Curtailment procedures.

### **34 Rates and Charges**

The Transmission Customer shall pay for Network Integration Transmission Service and Ancillary Services provided under Part III of this Tariff as provided for in the rates determined pursuant to Section 7 of the Northwest Power Act. In addition, the Network Customer shall pay the Transmission Provider for any Direct Assignment Facilities, and applicable study costs, consistent with Commission policy.

**34.1 Monthly Demand Charge: (Intentionally omitted.)**

**34.2 Determination of Network Customer's Monthly Network Load: (Intentionally omitted.)**

**34.3 Determination of Transmission Provider's Monthly Transmission System Load: (Intentionally omitted.)**

**34.4 Redispatch Charge: (Intentionally omitted.)**

**34.5 Stranded Cost Recovery:**

The Transmission Provider may seek to recover stranded costs from the Network Customer pursuant to this Tariff and pursuant to Section 7 of the Northwest Power Act.

### **35 Operating Arrangements**

#### **35.1 Operation under The Network Operating Agreement:**

The Network Customer shall plan, construct, operate and maintain its facilities in accordance with Good Utility Practice and in conformance with the Network Operating Agreement.

#### **35.2 Network Operating Agreement:**

The terms and conditions under which the Network Customer shall operate its facilities and the technical and operational matters associated with the implementation of Part III of the Tariff shall be specified in the Network Operating Agreement. The Network Operating Agreement shall provide for the Parties to (i) operate and maintain equipment necessary for integrating the Network Customer within the Transmission Provider's Transmission System (including, but not limited to, remote terminal units, metering, communications equipment and relaying equipment), (ii) transfer data between the Transmission Provider and the Network Customer (including, but not limited to, heat rates and operational characteristics of Network Resources, generation schedules for units outside the Transmission Provider's Transmission System, interchange schedules, unit outputs for redispatch required under Section 33, voltage schedules, loss factors and other real time data), (iii) use software programs required for data links and constraint dispatching, (iv) exchange data on forecasted loads and resources necessary for long-term planning, and (v) address any other technical and operational considerations required for implementation of Part III of the Tariff, including scheduling protocols.

The Network Operating Agreement will recognize that the Network Customer shall either (i) operate as a Control Area under applicable guidelines of the Electric

Reliability Organization (ERO) as defined in 18 C.F.R. § 39.1, the regional reliability organization, and the Northwest Power Pool (NWPP), (ii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with the Transmission Provider, or (iii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with another entity, consistent with Good Utility Practice, which satisfies the applicable reliability guidelines of the ERO, the regional reliability organization, and the NWPP. The Transmission Provider shall not unreasonably refuse to accept contractual arrangements with another entity for Ancillary Services. The Network Operating Agreement is included in Attachment G.

### **35.3 Network Operating Committee:**

A Network Operating Committee (Committee) shall be established to coordinate operating criteria for the Parties' respective responsibilities under the Network Operating Agreement. Each Network Customer shall be entitled to have at least one representative on the Committee. The Committee shall meet from time to time as need requires, but no less than once each calendar year.

## **IV. MISCELLANEOUS PROVISIONS**

### **36 Oversupply Management Protocol**

The Oversupply Management Protocol will apply when Transmission Provider displaces generation in its Control Area with generation from the federal hydroelectric system in order to moderate total dissolved gas levels in the Columbia River. When Transmission Provider determines that it is probable that the total dissolved gas levels measured by the U.S. Army Corps of Engineers will exceed, or when they do exceed,

Oregon and Washington water quality standards at projects that are spilling past unloaded turbines, the Transmission Provider has the right to initiate the Oversupply Management Protocol in Attachment P. All Transmission Customers that own or operate generating facilities in Transmission Provider's Control Area and all generators that own or operate generating facilities in Transmission Provider's Control Area shall act in accordance with the Oversupply Management Protocol in Attachment P. Attachment P shall not apply to curtailments under Sections 13.6, 14.7, or 33.

**SCHEDULE 1****Scheduling, System Control and Dispatch Service**

This service is required to schedule the movement of power through, out of, within, or into a Control Area. This service can be provided only by the operator of the Control Area in which the transmission facilities used for transmission service are located. Scheduling, System Control and Dispatch Service is to be provided directly by the Transmission Provider (if the Transmission Provider is the Control Area operator) or indirectly by the Transmission Provider making arrangements with the Control Area operator that performs this service for the Transmission Provider's Transmission System. The Transmission Customer must purchase this service from the Transmission Provider or the Control Area operator. The charges for Scheduling, System Control and Dispatch Service are to be based on the rate set forth in the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator.

**SCHEDULE 2****Reactive Supply and Voltage Control from Generation or Other Sources Service**

In order to maintain transmission voltages on the Transmission Provider's transmission facilities within acceptable limits, generation facilities and non-generation resources capable of providing this service that are under the control of the control area operator are operated to produce (or absorb) reactive power. Thus, Reactive Supply and Voltage Control from Generation or Other Sources Service must be provided for each transaction on the Transmission Provider's transmission facilities. The amount of Reactive Supply and Voltage Control from Generation or Other Sources Service that must be supplied with respect to the Transmission Customer's transaction will be determined based on the reactive power support necessary to maintain transmission voltages within limits that are generally accepted in the region and consistently adhered to by the Transmission Provider.

Reactive Supply and Voltage Control from Generation or Other Sources Service is to be provided directly by the Transmission Provider (if the Transmission Provider is the Control Area operator) or indirectly by the Transmission Provider making arrangements with the Control Area operator that performs this service for the Transmission Provider's Transmission System. The Transmission Customer must purchase this service from the Transmission Provider or the Control Area operator. The charges for such service will be based on the rate set forth in the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by the Control Area operator.

**SCHEDULE 3****Regulation and Frequency Response Service**

Regulation and Frequency Response Service is necessary to provide for the continuous balancing of resources (generation and interchange) with load and for maintaining scheduled Interconnection frequency at sixty cycles per second (60 Hz). Regulation and Frequency Response Service is accomplished by committing on-line generation whose output is raised or lowered (predominantly through the use of automatic generating control equipment) and by other non-generation resources capable of providing this service as necessary to follow the moment-by-moment changes in load.

The obligation to maintain this balance between resources and load lies with the Transmission Provider (or the Control Area operator that performs this function for the Transmission Provider). The Transmission Provider must offer this service when the transmission service is used to serve load within its Control Area. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements to satisfy its Regulation and Frequency Response Service obligation.

The Transmission Provider will take into account the speed and accuracy of regulation resources in its determination of Regulation and Frequency Response reserve requirements, including as it reviews whether a self-supplying Transmission Customer has made alternative comparable arrangements. Upon request by the self-supplying Transmission Customer, the Transmission Provider will share with the Transmission Customer its reasoning and any related data used to make the determination of whether the Transmission Customer has made alternative comparable arrangements.

The amount of and charges for Regulation and Frequency Response Service rate set forth in the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator.



**SCHEDULE 4****Energy Imbalance Service**

This Schedule 4 applies unless and until the EIM goes live in the BPA BAA. Once the EIM goes live in the BPA BAA, this Schedule 4 may apply as a temporary schedule in the event the BPA EIM Entity or the Market Operator takes corrective actions under Attachment Q, Section 10.

Energy Imbalance Service is provided when a difference occurs between the scheduled and the actual delivery of energy to a load located within a Control Area over a scheduling period. The Transmission Provider must offer this service when the transmission service is used to serve load within its Control Area. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements, which may include use of non-generation resources capable of providing this service, to satisfy its Energy Imbalance Service obligation. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator. The charges for Energy Imbalance Service are set forth in the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

**SCHEDULE 4E****Energy Imbalance Service**

This Schedule 4E takes effect on the date the EIM goes live in the BPA BAA.

Energy Imbalance Service is provided when a difference occurs between the scheduled and the actual delivery of energy to a load located within a Control Area over a scheduling period. The Transmission Provider must offer this service when the transmission service is used to serve load within its Control Area. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements, which may include use of non-generation resources capable of providing this service, to satisfy its Energy Imbalance Service obligation. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator. A Transmission Customer shall be charged or paid for Energy Imbalance Service as UIE pursuant to the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

**SCHEDULE 5****Operating Reserve - Spinning Reserve Service**

Spinning Reserve Service is needed to serve load immediately in the event of a system contingency. Spinning Reserve Service may be provided by generating units that are on-line and loaded at less than maximum output and by non-generation resources capable of providing this service. The Transmission Provider must offer this service to meet the Transmission Customer's Spinning Reserve Service obligation determined in accordance with applicable standards of the ERO or regional reliability organization. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements to satisfy its Spinning Reserve Service obligation. The amount of and charges for Spinning Reserve Service are set forth in the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator.

**SCHEDULE 6****Operating Reserve - Supplemental Reserve Service**

Supplemental Reserve Service is needed to serve load in the event of a system contingency; however, it is not available immediately to serve load but rather within a short period of time. Supplemental Reserve Service may be provided by generating units that are on-line but unloaded, by quick-start generation or by interruptible load or other non-generation resources capable of providing this service. The Transmission Provider must offer this service to meet the Transmission Customer's Supplemental Reserve Service obligation determined in accordance with applicable standards of the ERO or regional reliability organization. The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements to satisfy its Supplemental Reserve Service obligation. The amount of and charges for Supplemental Reserve Service are set forth in the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor. To the extent the Control Area operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area operator.

**SCHEDULE 7****Long-Term Firm and Short-Term Firm Point-To-Point Transmission Service**

The Transmission Customer shall compensate the Transmission Provider pursuant to the applicable rate in the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

(1) **Discounts:** Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.

(2) **Resales:** The rates and rules governing discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by Section 23.1 of the Tariff.

**SCHEDULE 8****Non-Firm Point-To-Point Transmission Service**

The Transmission Customer shall compensate the Transmission Provider pursuant to the applicable rate in the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

(1) **Discounts:** Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by the Transmission Provider must be announced to all Eligible Customers solely by posting on the OASIS, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, the Transmission Provider must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on the Transmission System.

(2) **Resales:** The rates and rules governing discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by Section 23.1 of the Tariff.

**SCHEDULE 9****Generator Imbalance Service**

This Schedule 9 applies unless and until the EIM goes live in the BPA BAA. Once the EIM goes live in the BPA BAA, this Schedule 9 may apply as a temporary schedule in the event the BPA EIM Entity or the Market Operator take corrective actions under Attachment Q, Section 10.

Generator Imbalance Service is provided when a difference occurs between the output of a generator located in the Transmission Provider's Control Area and a delivery schedule from that generator to (1) another Control Area or (2) a load within the Transmission Provider's Control Area over a scheduling period. Pursuant to Schedule 10, the Transmission Provider must offer this service, to the extent it is physically feasible to do so from its resources or from resources available to it, when transmission service is used to deliver energy from a generator located within its Control Area.

The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements, which may include use of non-generation resources capable of providing this service, to satisfy its Generator Imbalance Service obligation. The charges for Generator Imbalance Service are set forth in Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

To the extent the Control Area Operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area Operator.

For purposes of this Schedule 9, the Transmission Provider may bill a Generator owner or operator directly for this service in lieu of billing the Transmission Customer, pursuant to an interconnection agreement or other arrangement. In that case, the generator owner or operator will be deemed to be a “Transmission Customer” for the purposes of this schedule.

The Transmission Provider may charge the Transmission Customer a penalty for generator imbalances under this Schedule or a penalty for energy imbalances under Schedule 4 for imbalances occurring during the same scheduling period, but not both unless the imbalances aggravate rather than offset each other.



**SCHEDULE 9E****Generator Imbalance Service**

This Schedule 9E takes effect on the date the EIM goes live in the BPA BAA.

Generator Imbalance Service is provided when a difference occurs between the output of a generator, that is not a BPA EIM Participating Resource, located in the Transmission Provider's Control Area and the resource component of the Transmission Customer Base Schedule as submitted to the BPA EIM Entity Scheduling Coordinator from that generator to (1) another Control Area or (2) a load within the Transmission Provider's Control Area over a scheduling period. Pursuant to Schedule 10, the Transmission Provider must offer this service, to the extent it is physically feasible to do so from its resources or from resources available to it, when transmission service is used to deliver energy from a generator located within its Control Area.

The Transmission Customer must either purchase this service from the Transmission Provider or make alternative comparable arrangements, which may include use of non-generation resources capable of providing this service, to satisfy its Generator Imbalance Service obligation. A Transmission Customer shall be charged or paid for Generator Imbalance Service pursuant to the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

To the extent the Control Area Operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Control Area Operator.

For purposes of this Schedule 9E, the Transmission Provider may bill a GI Customer, Generator owner or operator directly for this service in lieu of billing the Transmission

Customer, pursuant to an interconnection agreement or other arrangement. In that case, the generator owner or operator will be deemed to be a “Transmission Customer” for the purposes of this schedule.

**SCHEDULE 10****Capacity for Generator Balancing Services**

Capacity for Generator Balancing Services is necessary to ensure the capacity is available to provide the energy for service under Schedule 9 or Schedule 9E, Generator Imbalance Service, as well as to provide regulation and frequency response for generation, in order to maintain scheduled Interconnection frequency at sixty cycles per second (60 Hz). The obligation to maintain the capacity under this Schedule 10 lies with the Transmission Provider (or the Balancing Authority that performs this function for the Transmission Provider).

The Transmission Provider must offer to provide capacity under this Schedule 10 to generation electrically located in the Transmission Provider's Control Area to the extent it will not unreasonably impair reliability. The Transmission Provider must establish a long-term planning process in its Balancing Reserve Capacity Business Practice and utilize that planning process to forecast the capacity needed to provide this service. The Transmission Provider will offer to provide capacity up to the forecast quantity from its resources or resources available to it. Any changes to the forecasted amount of capacity needed to provide this service will not take effect until that change is reflected in the charges for providing this service, unless needed for reliability or to comply with regulatory requirements. If a change in the forecasted amount of capacity is needed for reliability or to comply with regulatory requirements prior to a revision of the charges, Transmission Provider will convene the parties to review options to revise the charges to reflect the change in capacity, and take prudent steps to adjust rates either in accordance with the posted Rate Schedules or holding a hearing, either expedited or in the next scheduled hearing, under Section 7(i) of the Pacific Northwest Electric Power Planning and Conservation Act.

The Transmission Customer must either purchase this capacity for generator balancing services from the Transmission Provider or make alternative comparable arrangements, to satisfy its obligation.

The charges for Capacity for Generator Balancing Services are set forth in Transmission Provider's "Transmission, Ancillary, and Control Area Services Rate Schedules and General Rate Schedule Provisions," or its successor. To the extent the Balancing Authority performs this service for the Transmission Provider charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that Balancing Authority.

The Transmission Provider may charge the Transmission Customer for Capacity for Generator Balancing Service under this Schedule and for Frequency and Response Service under Schedule 3, since Capacity needs for load and generation may aggravate rather than offset each other.

**SCHEDULE 11****Real Power Loss Calculation**

The applicable Real Power Loss factors are as follows:

- a) for use of the Network Segment, the Loss Factors will be set on a Summer (June through August) and Non-Summer (September through May) seasonal basis as noted in the table below; and
- b) for use of the Southern Intertie Segment – 3.0 percent of kWh delivered.

<b>NETWORK LOSS FACTORS</b>	
Period	Loss Factors (%)
January 1, 12:00am PPT to February 1, 12:00am PPT	1.76 percent of kWh delivered
February 1, 12:00am PPT to March 1, 12:00am PPT	1.76 percent of kWh delivered
March 1, 12:00am PPT to April 1, 12:00am PPT	1.76 percent of kWh delivered
April 1, 12:00am PPT to May 1, 12:00am PPT	1.76 percent of kWh delivered
May 1, 12:00am PPT to June 1, 12:00am PPT	1.76 percent of kWh delivered
June 1, 12:00am PPT to July 1, 12:00am PPT	1.97 percent of kWh delivered
July 1, 12:00am PPT to August 1, 12:00am PPT	1.97 percent of kWh delivered
August 1, 12:00am PPT to September 1, 12:00am PPT	1.97 percent of kWh delivered
September 1, 12:00am PPT to October 1, 12:00am PPT	1.76 percent of kWh delivered
October 1, 12:00am PPT to November 1, 12:00am PPT	1.76 percent of kWh delivered
November 1, 12:00am PPT to December 1, 12:00am PPT	1.76 percent of kWh delivered
December 1, 12:00am PPT to January 1, 12:00am PPT	1.76 percent of kWh delivered

**ATTACHMENT A**

**Form Of Service Agreement For Firm Point-To-Point Transmission Service**

Service Agreement No. XXTX-XXXXX

**SERVICE AGREEMENT**

**for**

**POINT-TO-POINT**

**TRANSMISSION SERVICE**

**executed by the**

**UNITED STATES OF AMERICA**

**DEPARTMENT OF ENERGY**

**acting by and through the**

**BONNEVILLE POWER ADMINISTRATION**

**and**

**(CUSTOMER NAME)**

1. This Service Agreement is entered into, by and between the Bonneville Power Administration Transmission Services (Transmission Provider) and (Customer Name) (Transmission Customer).
2. The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Point-to-Point (PTP) Transmission Service under the Transmission Provider's Open Access Transmission Tariff (Tariff).
3. The Transmission Customer has provided to the Transmission Provider a deposit, if applicable, unless such deposit has been waived by the Transmission Provider, for Firm Point-to-Point Transmission Service in accordance with the provisions of Section 17.3 of the Tariff.
4. Service under this Service Agreement for a transaction shall commence on the first to occur of (1) the date on which the Transmission Customer receives notice its Energy Imbalance Marketing (EIM) Participating Resource is certified and therefore eligible to participate in the EIM; or (2) the later of (a) the Service Commencement Date as specified by the Transmission Customer in a subsequent request for transmission service; or (b) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed. This Service Agreement shall terminate on such date as mutually agreed upon by the Parties.

5. The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Point-to-Point Transmission Service in accordance with the provisions of Part II of the Tariff and this Service Agreement.
6. Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated in Exhibit D.
7. The Tariff, Exhibit A (Specifications for Long-Term Firm Point-to Point Transmission Service), Exhibit B (Direct Assignment and Use-of-Facilities Charges), Exhibit C (Ancillary Service Charges), Exhibit D (Notices), Exhibit E (Creditworthiness and Prepayment), and Exhibit F (Specifications for Conditional Firm Point-to-Point Transmission Service) are incorporated herein and made a part hereof. Capitalized terms not defined in this Service Agreement are defined in the Tariff.
8. This Service Agreement shall be interpreted, construed, and enforced in accordance with Federal law.
9. This Service Agreement shall inure to the benefit of and be binding upon the Parties and their respective successors and assigns.
10. The Transmission Customer and the Transmission Provider agree that provisions of Section 3201(i) of Public Law 104-134 (Bonneville Power Administration Refinancing Act) are incorporated in their entirety and hereby made a part of this Service Agreement.
11. Section 202 of Executive Order No. 11246, 30 Fed. Reg. 12319 (1965), as amended by Executive Order No. 12086, 43 Fed. Reg. 46501 (1978), as amended or supplemented, which provides, among other things, that the Transmission Customer will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin, is incorporated by reference in the Service Agreement the same as if the specific language had been written into the Service Agreement, except that Indian Tribes and tribal organizations may apply Indian preference to the extent permitted by Federal law.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials and may be executed by electronic signature and delivered electronically.

(CUSTOMER NAME)

UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive  
\_\_\_\_\_

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
*(Print/Type)*

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

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



**EXHIBIT A  
SPECIFICATIONS FOR LONG-TERM  
FIRM POINT-TO-POINT TRANSMISSION SERVICE**

**TRANSMISSION SERVICE REQUEST**

Assign Ref is: \_\_\_\_\_

**1. TERM OF TRANSACTION**

Service Commencement Date:

Termination Date:

**2. DESCRIPTION OF CAPACITY AND ENERGY TO BE TRANSMITTED BY TRANSMISSION PROVIDER AND MAXIMUM AMOUNT OF CAPACITY AND ENERGY TO BE TRANSMITTED (RESERVED CAPACITY)**

**3. POINT(S) OF RECEIPT**

**4. POINT(S) OF DELIVERY**

**5. DESIGNATION OF PARTY(IES) SUBJECT TO RECIPROCAL SERVICE**

**6. NAMES OF ANY INTERVENING SYSTEMS PROVIDING TRANSMISSION SERVICE**

**7. SERVICE AGREEMENT CHARGES**

Service under this Service Agreement will be subject to some combination of the charges detailed below and in Exhibits B and C. (The appropriate charges for transactions will be determined in accordance with the terms and conditions of the Tariff.)

- (a) Transmission Charge: [all applicable charges or discounts shall be identified]
- (b) System Impact and/or Facilities Study Charge(s):
- (c) Direct Assignment Facilities Charges:
- (d) Ancillary Service Charges:

**8. OTHER PROVISIONS SPECIFIC TO THIS SERVICE AGREEMENT**

**EXHIBIT B**  
**DIRECT ASSIGNMENT AND USE-OF-FACILITIES CHARGES**

**EXHIBIT C**  
**ANCILLARY SERVICE CHARGES**

**EXHIBIT D  
NOTICES****1. NOTICES RELATING TO PROVISIONS OF THE SERVICE AGREEMENT**

Any notice or other communication related to this Service Agreement, other than notices of an operating nature (section 2 below) shall be in writing and deemed to have been received if delivered in person, by email, by facsimile, by First Class mail or sent by overnight delivery service. Either Party may change its contact information by providing notice of such change to the other Party by any of the methods listed in this Section 1. Transmission Provider shall revise this Exhibit upon such notice. Revisions made solely to change contact information may be made without additional signatures by the Parties.

**2. NOTICES OF AN OPERATING NATURE**

Except as otherwise provided in this section, any notice, request or demand of an operating nature shall be in writing and deemed to have been received if delivered in person, by email, by facsimile, by First Class mail or sent by overnight delivery service.

For any service interruptions, emergency conditions, operating instructions, curtailments, or dispatch orders, Transmission Provider may notify Transmission Customer through any of the following methods: (1) by electronic signal pre-arranged between Transmission Customer and Transmission Provider, (2) by telephone, facsimile or email to the telephone numbers and email addresses set forth in this section, (3) by a change request to a transaction submitted according to the NERC e-Tag protocol, or (4) as otherwise agreed between Transmission Customer and Transmission Provider. Transmission Provider is not responsible for ensuring that Transmission Customer has the continuous ability to receive Transmission Provider's electronic signals.

**EXHIBIT E**  
**CREDITWORTHINESS AND PREPAYMENT**

**EXHIBIT F  
SPECIFICATIONS FOR CONDITIONAL  
FIRM POINT-TO-POINT TRANSMISSION SERVICE**

**TRANSMISSION SERVICE REQUEST**

Assign Ref is:

**1. TERM OF TRANSACTION**

Service Commencement Date  
Termination Date:

**2. SERVICE PARAMETERS**

**3. DESCRIPTION OF CAPACITY AND ENERGY TO BE TRANSMITTED BY TRANSMISSION PROVIDER AND MAXIMUM AMOUNT OF CAPACITY AND ENERGY TO BE TRANSMITTED (RESERVED CAPACITY)**

**4. POINT(S) OF RECEIPT**

**5. POINT(S) OF DELIVERY**

**6. DESIGNATION OF PARTY(IES) SUBJECT TO RECIPROCAL SERVICE**

**7. NAMES OF ANY INTERVENING SYSTEMS PROVIDING TRANSMISSION SERVICE**

**8. SERVICE AGREEMENT CHARGES**

Service will be subject to some combination of the charges detailed below and in Exhibits B and D. (The appropriate charges for transactions will be determined in accordance with the terms and conditions of the Tariff.)

- (a) Transmission Charge
- (b) System Impact and/or Facilities Study Charges
- (c) Direct Assignment and Use of Facility Charges
- (d) Ancillary Service Charges

**9. OTHER PROVISIONS SPECIFIC TO THIS TABLE**

**ATTACHMENT B**

**Form Of Service Agreement For Non-Firm Point-To-Point Transmission Service**

**(Intentionally omitted.)**

**ATTACHMENT C****Methodology To Assess Available Transfer Capability**

Documents referenced within this attachment are available on the Transmission Provider's website at [www.bpa.gov](http://www.bpa.gov). The Transmission Provider defines Total Transfer Capability (TTC), Existing Transmission Commitments (ETC), Capacity Benefit Margin (CBM) and Transmission Reliability Margin (TRM) in accordance with the North American Electric Reliability Corporation (NERC) Glossary of Terms. The Transmission Provider defines ATC path as any constraint for which the Transmission Provider calculates ATC.

*Scheduling, Operating, and Planning Time Horizon (0-13 months) ATC:*

This section of the Transmission Provider's Attachment C documents the Transmission Provider's methodology to calculate ATC across its ATC paths for the scheduling, operating, and planning time horizon (0-13 months). The Transmission Provider's methodology for evaluating new Transmission Service Requests for this time horizon is found in the Transmission Service Requests Evaluation Business Practice, or its successor.

The Transmission Provider calculates ATC, TTC, ETC and TRM consistent with applicable Commission standards, North American Electric Reliability Corporation (NERC) standards, and the Reliability Coordinator's (RC) System Operating Limits Methodology for the Operations Horizon. The Transmission Provider's methodologies for TTC, ATC, ETC and TRM are fully described in the Transmission Provider's ATC Implementation Document (ATCID) and Transmission Reliability Margin Implementation Document (TRMID).

The Transmission Provider follows NERC MOD-029-2a and NERC MOD-008-1, or their successors, for its ATC and TRM calculations for 0 to 13 months.

The Transmission Provider uses the following mathematical algorithms within MOD-029-2a, or its successor, to calculate firm and non-firm ATC for the scheduling horizon (same day and real-time), operating horizon (day ahead and pre-schedule) and planning horizon (beyond the operating horizon through month 13):



$$ATC_F = TTC - ETC_F - CBM - TRM + Postbacks_F + Counterflows_F$$

**Where:**

**ATC<sub>F</sub>** is the firm Available Transfer Capability for the ATC path during that period.

**TTC** is the Total Transfer Capability of the ATC path during that period.

**ETC<sub>F</sub>** is the sum of existing firm commitments for the ATC path during that period.

**CBM** is the Capacity Benefit Margin for the ATC path during that period.

**TRM** is the Transmission Reliability Margin for the ATC path during that period.

**Postbacks<sub>F</sub>** are changes to firm Available Transfer Capability due to a change in the use of transmission service during that period, as defined in the Transmission Provider's ATCID.

**Counterflows<sub>F</sub>** are adjustments to firm Available Transfer Capability as determined by the Transmission Service Provider and specified in the ATCID.

$$ATC_{NF} = TTC - ETC_F - ETC_{NF} - CBM_S - TRM_U + Postbacks_{NF} + Counterflows_{NF}$$

**Where:**

**ATC<sub>NF</sub>** is the non-firm Available Transfer Capability for the ATC path during that period.

**TTC** is the Total Transfer Capability of the ATC path during that period.

**ETC<sub>F</sub>** is the sum of existing firm commitments for the ATC path during that period.

**ETC<sub>NF</sub>** is the sum of existing non-firm commitments for the ATC path during that period.

**CBM<sub>S</sub>** is the Capacity Benefit Margin for the ATC path that has been scheduled during that period.

**TRM<sub>U</sub>** is the Transmission Reliability Margin for the ATC path that has not been released for sale (unreleased) as non-firm capacity by the Transmission Provider during that period.

**Postbacks<sub>NF</sub>** are changes to non-firm Available Transfer Capability due to a change in the use of transmission service for that period, as defined in the Transmission Provider's ATCID.

**Counterflows<sub>NF</sub>** are adjustments to non-firm Available Transfer Capability as determined by the Transmission Service Provider and specified in the ATCID.

The Transmission Provider uses the following mathematical algorithms within MOD-029-2a, or its successor, to calculate firm and non-firm ETC for the scheduling horizon (same

day and real-time), operating horizon (day ahead and pre-schedule) and planning horizon (beyond the operating horizon through month 13):

$$ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F$$

**Where:**

**NL<sub>F</sub>** is the firm capacity set aside to serve Native Load Customers for the time period being calculated, to include losses, and load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

**NITS<sub>F</sub>** is the firm capacity reserved for Network Integration Transmission Service serving Network Load, to include losses, and Network Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

**GF<sub>F</sub>** is the firm capacity set aside for grandfathered transmission service and contracts for energy and/or transmission service initially executed prior to the Commission's issuance of Order No. 888.

**PTP<sub>F</sub>** is the firm capacity reserved for confirmed Point-to-Point transmission service.

**ROR<sub>F</sub>** is the firm capacity reserved for roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take transmission service when the Transmission Customer's transmission service contract expires or is eligible for renewal.

**OS<sub>F</sub>** is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using firm transmission service as specified in the ATCID.

$$ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}$$

**Where:**

**NITS<sub>NF</sub>** is the non-firm capacity set aside for Network Integration Transmission Service serving Network Load (i.e., secondary service), to include losses, and Network Load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

**GF<sub>NF</sub>** is the non-firm capacity set aside for grandfathered transmission service and contracts for energy and/or transmission service initially executed prior to the Commission's issuance of Order No. 888.

**PTP<sub>NF</sub>** is non-firm capacity reserved for confirmed Point-to-Point transmission service.

**OS<sub>NF</sub>** is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

The Transmission Provider uses NERC MOD-029-2a and the RC's System Operating Limits Methodology for the Operations Horizon to calculate TTCs for the Transmission Provider's ATC paths. Additional information on the Transmission Provider's TTC calculation methodology, databases used in TTC assessments, and assumptions used in TTC assessments regarding loads level, generation dispatch and modeling of planned and contingency outages is found in the ATCID.

The Transmission Provider's ATCID also contains further details on the Transmission Provider's ETC calculation methodology, information on how new Point-to-Point requests are incorporated into ETC, and processes for releasing non-firm capacity. The Transmission Provider assumes a Transmission Customer with a transmission service contract containing the right of first refusal will continue to take transmission service when that contract expires or is eligible for renewal, unless otherwise notified by the Transmission Customer.

The Transmission Provider calculates TRM in accordance with NERC MOD-008-01, or its successor. The TRM calculation methodology for the paths where the Transmission Provider has implemented TRM is found in the TRMID.

The Transmission Provider does not set aside transfer capability for CBM.

Long-Term Planning Time Horizon (beyond 13 months) ATC:

For the long-term planning horizon (beyond 13 months to 10 years), the Transmission Provider has 1:1 ATC paths and flow-based paths, which are identified in the Map of Long-Term BPA Constraints, or its successor, provided on the Transmission Provider's external website.

1. For 1:1 ATC paths, the Transmission Provider uses the following mathematical algorithms to calculate firm ATC and firm ETC for the long-term planning time horizon (beyond 13 months and extending out to 10 years):

$$ATC_F = TTC - ETC_F - TRM$$

**Where:**

**ATC<sub>F</sub>** is the firm Available Transfer Capability for the ATC path during that period.

**TTC** is the Total Transfer Capability of the ATC path during that period.

**ETC<sub>F</sub>** is the sum of existing firm commitments for the ATC path during that period.

**TRM** is the Transmission Reliability Margin for the ATC path during that period.

$$ETC_F = NITS_F + GF_F + PTP_F + ROR_F$$

**Where:**

**NITS<sub>F</sub>** is the firm capacity reserved for Network Integration Transmission Service serving Network Load, to include losses, and Network Load growth.

**GF<sub>F</sub>** is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service initially executed prior to the Commission's issuance of Order No. 888.

**PTP<sub>F</sub>** is the firm capacity reserved for confirmed firm Point-to-Point Transmission Service.

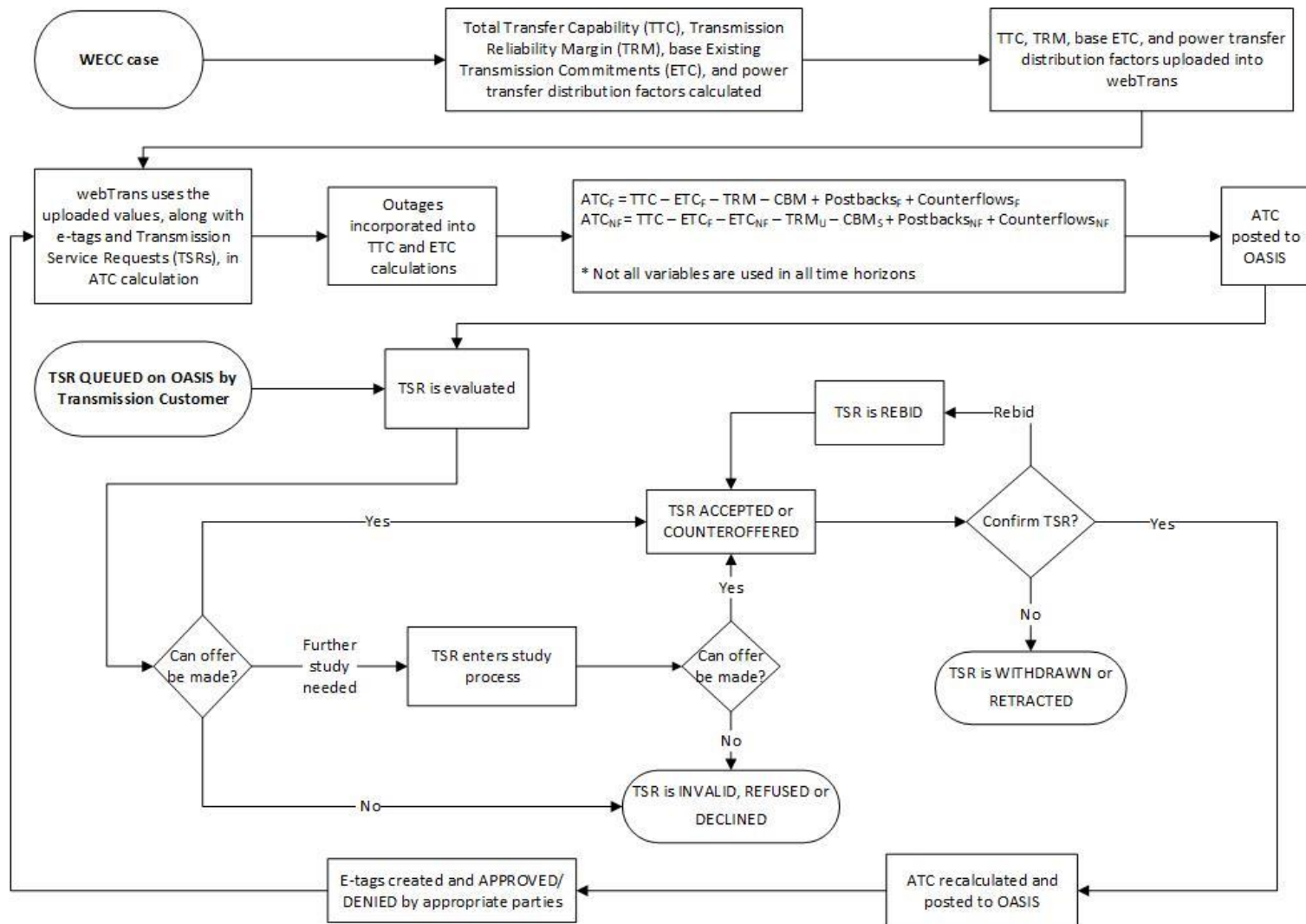
**ROR<sub>F</sub>** is the firm capacity reserved for roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take transmission service when the Transmission Customer's transmission service contract expires or is eligible for renewal.

To calculate TTC, Transmission Provider performs reliability studies to satisfy NERC standard TPL-001-4, or its successor, and to identify a range of System Operating Limits for each ATC path. TTC values for the long-term planning time horizon are determined consistent with the System Operating Limits.

The Transmission Provider's ETC<sub>F</sub> and TRM methodologies are captured in the Transmission Provider's Available Transfer Capability (ATC) Methodologies for the Planning Time Period document, or its successor.

2. For the flow-based paths, the Transmission Provider does not calculate ATC for the long-term planning time horizon (beyond 13 months and extending out to 10 years). Commercial powerflow studies are performed to evaluate whether transmission service requests and/or Network Load and resource forecasts, impacting flow-based constraints during this time period, can be granted or require additional study to identify transmission system upgrades necessary to reliably offer transmission service.

ATC Calculation Process Flow Diagram



**ATTACHMENT D****Methodology for Completing a System Impact Study**

The Transmission Provider will complete a System Impact Study (SIS) to assess the impact of a Transmission Service request on the Federal Columbia River Transmission System. The SIS will identify the need and approximate scope of system expansion to accommodate the requested service. The SIS may evaluate, using power flow analysis, the effect of the requested transmission service on the performance of the transmission system under plausible scenario(s), including varied operating condition(s), and season(s). The SIS will evaluate Transmission System performance against applicable criteria and standards. The SIS will rely on previous studies to the maximum extent possible.

**ATTACHMENT E**

**Index Of Point-To-Point Transmission Service Customers**

A list of Point-To-Point Transmission Service customers and Service Agreements can be found on Bonneville's OASIS.



**ATTACHMENT F**

**Service Agreement For Network Integration Transmission Service**

Service Agreement No. XXXX-XXXXX

**SERVICE AGREEMENT  
FOR  
NETWORK INTEGRATION  
TRANSMISSION SERVICE  
EXECUTED BY THE  
UNITED STATES OF AMERICA  
DEPARTMENT OF ENERGY  
Acting by and through the  
BONNEVILLE POWER ADMINISTRATION  
and  
(CUSTOMER)**

1. This Service Agreement is entered into, by and between the Bonneville Power Administration Transmission Services (Transmission Provider) and (Customer Name) (Transmission Customer).
2. The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Network Integration Transmission Service under the Transmission Provider's Open Access Transmission Tariff (Tariff).
3. The Transmission Customer has provided to the Transmission Provider a deposit, unless such deposit has been waived by the Transmission Provider, for Transmission Service in accordance with the provisions of Section 29.2 of the Tariff.
4. Service under this agreement shall commence on the later of (1) the requested Service Commencement Date, or (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed. Service under this agreement shall terminate on such date as mutually agreed upon by the parties.
5. The Transmission Provider agrees to provide and the Transmission Customer agrees to pay for Network Integration Transmission Service in accordance with the provisions of Part III of the Tariff and this Service Agreement.
6. Any notice or request made to or by either Party regarding this Service Agreement shall be made to the representative of the other Party as indicated in Exhibit D.
7. The Tariff, Exhibit A (Specifications for Network Integration Transmission Service), Exhibit B (Direct Assignment and Use-of-Facilities Charges), Exhibit C (Ancillary

Services), and Exhibit D (Notices) are incorporated herein and made a part hereof. Capitalized terms not defined in this agreement are defined in the Tariff.

- 8. This Service Agreement shall be interpreted, construed, and enforced in accordance with Federal law.
- 9. This Service Agreement shall inure to the benefit of and be binding upon the Parties and their respective successors.
- 10. [Customer Option] The Transmission Customer and the Transmission Provider agree that provisions of Section 3201(i) of Public Law 104-134 (Bonneville Power Administration Refinancing Act) are incorporated in their entirety and hereby made a part of this Service Agreement.
- 11. Section 202 of Executive Order No. 11246, 30 Fed. Reg. 12319 (1965), as amended by Executive Order No. 12086, 43 Fed. Reg. 46501 (1978), as amended or supplemented, which provides, among other things, that the Transmission Customer will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin, is incorporated by reference in the Service Agreement the same as if the specific language had been written into the Service Agreement, except that Indian Tribes and tribal organizations may apply Indian preference to the extent permitted by Federal law.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials and may be executed by electronic signature and delivered electronically.

(CUSTOMER NAME)

UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

\_\_\_\_\_

\_\_\_\_\_

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

Title: Transmission Account Executive

\_\_\_\_\_

\_\_\_\_\_

If opting out of the electronic signature:

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

Name: \_\_\_\_\_

*(Print/Type)*

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

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

**EXHIBIT A  
SPECIFICATIONS FOR  
NETWORK INTEGRATION TRANSMISSION SERVICE**

**TRANSMISSION SERVICE REQUEST**

Assign Ref is:

**1. TERM OF TRANSACTION**

Service Commencement Date:

Termination Date:

**2. NETWORK RESOURCES**

**3. POINT(S) OF RECEIPT**

**4. POINT(S) OF DELIVERY**

**5. NETWORK LOAD**

**6. DESIGNATION OF PARTY(IES) SUBJECT TO RECIPROCAL SERVICE OBLIGATION**

**7. NAMES OF ANY INTERVENING SYSTEMS PROVIDING TRANSMISSION SERVICE**

**8. SERVICE AGREEMENT CHARGES**

**Service under this Agreement may be subject to some combination of the charges detailed below and in Exhibits B and C. (The appropriate charges for transactions will be determined in accordance with the terms and conditions of the Tariff.)**

- (a) Transmission Charge:
- (b) System Impact and/or Facilities Study Charge(s):
- (c) Direct Assignment Facilities Charges:
- (d) Ancillary Service Charges:

**9. OTHER PROVISIONS SPECIFIC TO THIS SERVICE AGREEMENT**

**EXHIBIT B**

**DIRECT ASSIGNMENT AND USE-OF-FACILITIES CHARGES**

**EXHIBIT C**  
**ANCILLARY SERVICE CHARGES**

**EXHIBIT D  
NOTICES****1. NOTICES RELATING TO PROVISIONS OF THE SERVICE AGREEMENT**

Any notice or other communication related to this Service Agreement, other than notices of an operating nature (section 2 below) shall be in writing and deemed to have been received if delivered in person, by email, by facsimile, by First Class mail or sent by overnight delivery service. Either Party may change the contact information by providing notice of such change to the other Party by any of the methods listed in this Section 1. The Transmission Provider shall revise this Exhibit upon such notice. Revisions made solely to change contact information may be made without additional signatures by the Parties.

**2. NOTICES OF AN OPERATING NATURE**

Except as otherwise provided in this section, any notice, request or demand of an operating nature shall be in writing and deemed to have been received if delivered in person, by email, by facsimile, by First Class mail or sent by overnight delivery service.

For any service interruptions, emergency conditions, operating instructions, curtailments, or dispatch orders, Transmission Provider may notify Transmission Customer through any of the following methods: (1) by electronic signal pre-arranged between Transmission Customer and Transmission Provider, (2) by telephone, facsimile or email to the telephone numbers and email addresses set forth in this section, (3) by a change request to a transaction submitted according to the NERC e-Tag protocol, or (4) as otherwise agreed between Transmission Customer and Transmission Provider. Transmission Provider is not responsible for ensuring that Transmission Customer has the continuous ability to receive Transmission Provider's electronic signals.

**ATTACHMENT G****Network Operating Agreement**

The Transmission Provider will provide the Network Operating Agreement when it negotiates and offers a Network Integration Transmission Service Agreement.

The Network Operating Agreement will set forth the terms and conditions under which the Network Customer will be required to operate its facilities as well as technical and operational matters associated with the provision of Network Integration Transmission Service.

The Network Operating Agreement will include, but is not limited to the following:

- Authorized Representatives of the Parties
- Network Operating Committee
- System Protection
- System Regulation and Operating Reserves
- Service Conditions
- Management of Transmission Constraints
- Emergency Procedures
- Maintenance of Facilities
- Data, Information, and Reports
- Metering
- Communications
- Transmission Losses
- Administrative Provisions
- Operational Regulatory Compliance
- Other Operational and Technical Matters as Needed



**ATTACHMENT H**

**Annual Transmission Revenue Requirement For Network Integration Transmission  
Service**

**(Intentionally omitted.)**

**ATTACHMENT I**

**Index Of Network Integration Transmission Service Customers**

A list of Network Integration Transmission Service customers and Service Agreements can be found on Bonneville's OASIS.

**ATTACHMENT J****Procedures for Addressing Parallel Flows**

The North American Electric Reliability Corporation's ("NERC") Qualified Path Unscheduled Flow Relief for the Western Electricity Coordinating Council (WECC), Reliability Standard WECC-IRO-STD-006-0 filed by NERC in Docket No. RR07-11-000 on March 26, 2007, and approved by the Commission on June 8, 2007, and any amendments thereto, are hereby incorporated and made part of this Tariff. See [www.nerc.com](http://www.nerc.com) for the current version of the NERC's Qualified Path Unscheduled Flow Relief Procedures for WECC.

**ATTACHMENT K****Transmission Planning Process****PART I****INTRODUCTION**

The objective of the annual Transmission Provider process is to develop a transmission plan that cost effectively meets safety, reliability, economic, environmental, public policy and other objectives.

The Transmission Provider will conduct its planning process in an open, coordinated, and transparent manner.

The Transmission Provider's annual transmission planning process will include a series of open planning meetings that will allow anyone, including network and point-to-point customers, interconnected neighbors, regulatory and state bodies and other Persons, to provide input into and comment on the Transmission Provider's development of a ten-year plan for the Transmission Provider's Transmission System ("BPA Plan").

The Transmission Provider also will communicate regarding its transmission planning with neighboring transmission providers and Persons interested in the NorthernGrid planning process, which is a process that is open to everyone. Part IV of this Attachment K includes reference to the NorthernGrid Planning Agreement, which is posted on the NorthernGrid Website. The Transmission Provider is a Member in the NorthernGrid Member Region and participates in regional planning as a party to the NorthernGrid Planning Agreement. Capitalized terms used in this Attachment K are defined in the body of this Attachment K, in Appendix A to this Attachment K, in the NorthernGrid Planning Agreement, or elsewhere in this OATT.

The Transmission Provider participates in coordinated planning throughout the Western Interconnection as a whole through its membership in the Western Electricity Coordinating Council (WECC) and participation in the WECC Reliability Assessment Committee (RAC) and its sub-committees. The WECC RAC provides for the development and maintenance of an economic transmission study database for the entire Western Interconnection and performs studies at the Western Interconnection level.

## **PART II**

### **RESPONSIBILITIES UNDER ATTACHMENT K**

The planning processes described in this Attachment K are intended to result in plans for the Transmission Provider's Transmission System, which are updated annually. This planning process will support the responsibilities of the Transmission Provider under other provisions of its OATT to provide transmission and interconnection service on its Transmission System.

This Attachment K describes the process by which the Transmission Provider intends to coordinate with its Transmission Customers, neighboring transmission providers, affected state authorities, and other stakeholders. Neither this Attachment K, nor the BPA Plan, dictates or establishes which investments identified in a BPA Plan should be made, or how costs of such investments should be recovered. The Transmission Provider will decide which of such identified investments it will make taking into consideration information gathered in the planning process described in this Attachment K, and any process required by the National Environmental Policy Act (NEPA), but retains the discretion to make such decisions in accordance with applicable statutes and policies.

This Attachment K describes a planning process that contemplates actions by not only the Transmission Provider and its customers under this OATT, but also others that may not be bound to comply with this Attachment K, such as other transmission providers (and their transmission or interconnection customers), States, Tribes, WECC, sub-regional planning groups, and other stakeholders and interested Persons. The Transmission Provider may be obligated as specified elsewhere in this Attachment K to participate in planning activities, including providing data and notices of its activities, and soliciting and considering written comments of stakeholders and interested Persons. However, this Attachment K contemplates cooperation and activities by entities that may not be bound by contract or regulation to perform the activities described for them. Failure by any entity or Person other than the Transmission Provider to cooperate or perform as contemplated under this Attachment K, may impede or prevent performance by the Transmission Provider of activities as described in this Attachment K. The Transmission Provider shall use reasonable efforts to secure the performance of other entities with respect to the planning activities described in this Attachment K, but shall have no other or additional obligation for, or for ensuring, the cooperation or performance by any other entity described in or contemplated by this Attachment K. For example, if and to the extent any Transmission Customer or other entity fails to provide suitable data or other information as required or contemplated by this Attachment K, the Transmission Provider cannot effectively include such customer and its needs in the Transmission Provider's planning.

## PART III

### THE BPA PLANNING PROCESS

#### 1. Overview

The Bonneville Power Administration (BPA) is a federal power marketing agency based in the Pacific Northwest and located within the WECC reliability region. BPA's service territory includes Idaho, Oregon, Washington, western Montana and certain adjacent parts of eastern Montana, California, Nevada, Utah and Wyoming, as described in Northwest Power Act, 16 U.S.C. § 839a(14).

BPA's Planning Process is an annual process by which BPA

- Assesses performance of its Transmission System.
- Develops system reinforcement plans expected to allow BPA's Transmission System to meet applicable planning criteria and standards (as defined in Sections 2.5 and 4, below, for Part III of this Attachment K) throughout BPA's 10-year planning horizon.
- Addresses reliability needs and service requests on the Transmission Provider's system.
- Evaluates transmission needs driven by Public Policy Mandates.
- Considers plans and proposed projects developed by neighboring systems, sub-regional and regional planning processes.
- Develops plans of service from a one-utility perspective.
- Meets economic, environmental and other objectives of the system.
- Informs customers and interested Persons and its budget process of the need and timing for expenditure of funds necessary to meet its obligations to provide reliable transmission service to all of its customers.
- Provides customers, stakeholders, and interested Persons meaningful opportunities to participate in the development of BPA's Plans.
- Considers all resources on a comparable basis.

BPA will involve its customers and interested Persons in its planning process through the following:

- Inviting customers and interested Persons to participate in BPA's Planning Process, including meetings specifically designed to gather input and comment during the phases of the Planning Process.
- Sharing planning studies and supporting assumptions for comment throughout the Planning Process.

- Posting the BPA Plan and the availability of supporting studies and results on the System Planning page of its OASIS website.
- Posting on the System Planning page of its OASIS website contact information for planning related questions, including an e-mail address for interested Persons to submit questions or provide comments; and, as available, posting contact information for specific projects.
- Developing business practices with input from customers and stakeholders to facilitate implementation of this Attachment K.
- Participating in the NorthernGrid planning process.
- Participating in the WECC/RAC process.

## **2. Sequence of BPA Planning Process**

The Transmission Provider's planning cycle is an annual Planning Process resulting in an updated BPA Plan.

### **2.1 Assumptions/Methodology**

At the beginning of the Planning Process, the Transmission Provider will:

2.1.1 Request and receive updated information from customers about loads, generation, and demand response resources during the planning horizon, as specified in section III.6, below. This information is due annually from customers by March 1.

2.1.2 In preparation for performing the system assessment identified in section III.2.2, below, participate in the development of WECC base cases by using the customer information provided under section III.2.1.1 and by working with the WECC Northwest Area Coordinator, Northwest Power Pool, or successor organization.

2.1.3 Develop assumptions and methodologies, identify the applicable Transmission Provider's Planning Criteria and standards for the Planning Process; post notice of the availability of such assumptions, methodologies, the applicable Transmission Provider's Planning Criteria and standards on the System Planning page of its OASIS website. The Transmission Provider will update the posting with revised information as appropriate.

2.1.4 Meet with stakeholders and interested Persons to discuss and receive comment on assumptions, methodologies, and criteria for future planning studies.

2.1.5 After consideration of the input received from stakeholders and interested Persons, the Transmission Provider will update and finalize planning assumptions, and post the availability of such assumptions on the System Planning page of its OASIS website.

2.1.6 Customers and other stakeholders may identify transmission needs driven by Public Policy Mandates during Planning Meeting I of the Transmission Provider's Planning Process cycle as described in section III.5.2.1.

2.1.7 After consideration of the transmission needs driven by Public Policy

Mandates identified by customers and other stakeholders, the Transmission Provider will select, on a non-discriminatory basis, needs for further evaluation. The Transmission Provider will consider factors including, but not limited to, the following:

(i) the level and form of support for addressing the potential transmission need driven by Public Policy Mandates (such as indications of willingness to purchase capacity and existing transmission service requests that could use capacity consistent with solutions that would address the potential need);

(ii) the feasibility of addressing the potential transmission need driven by Public Policy Mandates;

(iii) the extent to which addressing the potential transmission need driven by Public Policy Mandates would also address other Transmission Provider's Needs identified in the previous planning cycle or other potential Transmission Provider's Needs in the current planning cycle; and

(iv) the factual basis supporting the potential transmission need driven by Public Policy Mandates.

No single factor shall necessarily be determinative in selecting among the potential transmission needs driven by Public Policy Mandates for inclusion in the system assessment.

Following the selection, the Transmission Provider will post on the System Planning page of its OASIS website an explanation of why certain identified transmission needs driven by Public Policy Mandates, if any, were not selected for further evaluation.

## **2.2 System Assessment**

After finalizing the Planning Process assumptions, the Transmission Provider will:

2.2.1 Conduct a system assessment which considers: a) needs driven by reliability, including meeting the Transmission Provider's Planning Criteria (described in section III.4), b) selected transmission needs driven by Public Policy Mandates (as described in section III.2.1.7 above), and c) requested transmission service. This system assessment will be used to identify potential deficiencies in system performance or other needs for system improvement during the planning horizon.

2.2.2 Prepare a summary of the preliminary results of this assessment and post this summary on the System Planning page of its OASIS website.

## **2.3 Conceptual Solutions**

Following the system assessment, the Transmission Provider will:

2.3.1 Identify conceptual solutions to: (a) prevent potential violations of the Transmission Provider's Planning Criteria identified in the system assessment conducted as provided in section III.2.2.1, above, and (b) satisfy new service requests, and (c) transmission needs driven by Public Policy Mandates that the Transmission Provider selected for further evaluation. The Transmission Provider will post notice of the availability of such conceptual solutions on the System Planning page of its OASIS website. For solutions that affect more systems than the Transmission Provider's



Transmission System, the Transmission Provider will advance the conceptual solutions in the NorthernGrid planning process as provided in Part IV.

2.3.2 Provide an opportunity for customers and interested Persons to review and comment on the results of (i) the system assessment, (ii) the conceptual solutions that affect only the Transmission Provider's Transmission System, (iii) possible system upgrade needs affecting more than one transmission system for the purpose of providing requested transmission or interconnection service, and (iv) the initial Economic Study results as specified in section III.3.

## **2.4 Plans of Service**

Following the identification of conceptual solutions, the Transmission Provider will:

2.4.1 Determine which conceptual solutions require development of draft plans of service in the current Planning Process and develop draft plans of service, cost estimates, and economic analyses for such draft plans. Post the availability of such plans, estimates, and analyses on the System Planning page of its OASIS website. Posted draft plans of service that affect more than the Transmission Provider's Transmission System will be considered in coordination with the NorthernGrid planning process.

2.4.2 In coordination with the NorthernGrid planning process, meet with interested persons to present, discuss, and receive comments on the draft plans of service, cost estimates, and economic analyses and to discuss the initial results of high priority Economic Studies performed pursuant to section III.3.

2.4.3 Develop preferred plans of service.

## **2.5 BPA Plan**

The BPA Plan will cover a 10-year planning horizon. The BPA Plan will include a brief narrative description of the Transmission Provider's Need, the preferred solution, an estimated cost, and estimated schedule for completion of the solution. The BPA Plan will also reflect any plans for facilities on the Transmission Provider's Transmission System that are needed to: (i) provide requested interconnection or (ii) provide requested transmission service. The Transmission Provider will post a draft of its BPA Plan on the System Planning page of its OASIS website for comment, and shall consider such comments in developing its final BPA Plan. The assumptions, applicable Transmission Provider's Planning Criteria, and methodologies used in the BPA Plan will be posted in accordance with section III.2.1.

2.5.1 With respect to any alternative solution considered by the Transmission Provider for development of a plan of service and inclusion in the BPA Plan, including both transmission and non-transmission alternatives proposed by the Transmission Provider or by customers or interested persons, the Transmission Provider shall evaluate such alternative using criteria that include the following:

- (i) degree of development of alternative;
- (ii) relative economics and effectiveness of performance;
- (iii) coordination with any affected Transmission Systems;

- (iv) consistency with the planning standards and criteria listed in section III.4, below; and
- (v) degree to which the alternative addresses one or more of the Transmission Provider's Needs.

2.5.2 Customers and interested Persons may propose alternatives to be considered by the Transmission Provider in developing the BPA Plan at any time after notice of availability of the system assessment results pursuant to section III.2.2.2 until the end of the period for comments on the draft plans made available pursuant to section III.2.4.2.

2.5.3 After consideration of comments and alternatives, update the BPA Plan with the latest plans of service for proposed projects. The Transmission Provider will post its finalized BPA Plan on the System Planning page of its OASIS website.

### **3. Economic Planning Studies**

#### **3.1 General**

As described below, the Transmission Provider will perform or cause to be performed Economic Studies that are requested by a customer(s), interested Person(s), or the Transmission Provider's transmission planning function to estimate the costs and benefits of transmission projects and that are selected for study under the procedures described below. Regional and sub- regional Economic Studies will be coordinated with other entities through NorthernGrid or WECC, as provided in Part IV below.

#### **3.2 Requests for Economic Studies**

Any customer, interested Person, group of customers or interested Persons, or the Transmission Provider's transmission planning function, may submit a request for an Economic Study to Transmission Provider. All requests shall be submitted to Transmission Provider electronically by October 31 annually for performance of studies in the following year in accordance with a business practice established by the Transmission Provider. The Transmission Provider will post each request for an Economic Study on the System Planning page of its OASIS website.

The Transmission Provider will hold or cause to be held a public meeting to review each request that has been received for an Economic Study and to receive input on such requests from interested Persons. The Transmission Provider may review Economic Study Requests as part of its regularly scheduled Planning Meetings as outlined in section III.5.

After consideration of such review and input, the Transmission Provider will determine:

- (i) whether, and to what extent, a requested Economic Study should be clustered with other Economic Study requests; and
- (ii) whether a requested Economic Study should be considered a high priority. High priority Economic Studies will be funded by the Transmission Provider. The Transmission Provider will give high priority to up to two Economic

Studies per year. Such high priority studies may result from clustering Economic Study requests. The Transmission Provider will give priority consideration to requests for Economic Studies: (1) to study the costs of modifications to existing paths on the Transmission Provider's Transmission System, or construction of new paths, needed to integrate either locally, sub-regionally, or regionally, aggregated new generation or load, (2) to requests including sufficient information about the locations, characteristics, and sizes of loads and resources to support feasibility of the study, and (3) to requests having broad support. One high priority Economic Study will be identified as a result of an Economic Study request submitted by the Transmission Provider's planning function. One additional Economic Study will be based upon Economic Study requests from customers or interested stakeholders. If the Transmission Provider determines that neither the stakeholders nor the Transmission Provider's transmission planning function has submitted new requests that are for high priority Economic Studies, the Transmission Provider will update the most recent priority Economic Studies upon request.

(iii) Any Economic Studies determined not to be high priority will not be performed by the Transmission Provider. However, the Transmission Provider may assist the requestor to find an alternate source for performing the studies and by providing planning information for use by the requestor or alternate source in performing the studies, at the requestor's expense.

(iv) High priority requests that affect transmission systems in addition to the Transmission Provider's system will be coordinated with other transmission owners through NorthernGrid. The Transmission Provider will assume primary responsibility for leading and performing necessary analytical work at NorthernGrid for such studies.

(v) The Transmission Provider will forward Economic Study requests that require production cost analysis to NorthernGrid for review and prioritization, and forwarding to RAC for performance of studies, in accordance with section IV, below.

### **3.3 Economic Study Results**

The Transmission Provider will post the availability of initial Economic Study results on the System Planning page of its OASIS website and discuss such initial results at meetings identified for such purpose in section III.5. The Transmission Provider may subsequently provide updates or revisions to such study results.

## **4. Transmission Provider's Planning Criteria**

The Transmission Provider shall apply, as applicable, the then-current versions of the following as planning standards and criteria:

- (i) NERC Standard for Transmission System Planning Performance Requirements;
- (ii) WECC Criteria for Transmission System Planning Performance;

(iii) Other transmission planning criteria and guidelines adopted by the Transmission Provider or applicable to the Transmission Provider pursuant to law or regulation.

The Transmission Provider will maintain an updated posting of a link to such planning standards and criteria on the System Planning page of its OASIS website.

## **5. Participation**

Participation in the Planning Process described in section III of this Attachment K will be open to all interested parties, including but not limited to all transmission and interconnection customers, state authorities, tribal representatives, and other stakeholders.

### **5.1 BPA Transmission Planning Interested Persons List**

The BPA Transmission Planning Interested Persons List includes all existing Network Transmission (NT), Point to Point (PTP), and customers receiving service under non-OATT transmission contracts (“Grandfathered Transmission Service Customers”) and other Persons who sign up on the System Planning page of the Transmission Provider’s OASIS website to be on the list. The Transmission Provider will provide email notification to the BPA Transmission Planning Interested Persons List regarding the development of a new planning project or study effort that may arise as part of the Planning Process, or other significant events, and invite them to participate in related planning meetings.

### **5.2 Planning Meetings and Related Postings**

The Transmission Provider provides opportunities for customers and interested Persons to participate in the Planning Process by conducting a series of open public meetings and issuing postings throughout the Planning Process as described below. A minimum of two meetings will be held each year, and two postings issued each year, to provide an opportunity for customers and interested Persons to provide input to the Planning Process. The Transmission Provider may hold additional planning meetings.

In addition to the purposes specifically described below, the purpose of the planning meetings is to discuss the Transmission Provider’s anticipated planning studies, receive input to consider in evaluation and performance of the planning studies, and to inform customers and interested Persons of the results of planning studies and the status of pending projects. The Transmission Provider will post information that it will make available at each meeting, and identify the analytical tools used to conduct studies made available, on the System Planning page of its OASIS website prior to the meeting. The Transmission Provider will receive comments submitted within five business days after the meeting, unless the Transmission Provider specifies a different comment period.

#### **5.2.1 Planning Meeting I**

During Planning Meeting I, the Transmission Provider will present the BPA Plan from the Transmission Provider’s previous Planning Process. The Transmission Provider will also discuss updates to the data, assumptions, criteria, and methodologies to be used in

the pending Planning Process and receive comment. The Transmission Provider will also discuss the Economic Study requests previously submitted pursuant to section III.3 and possible Economic Studies.

During Planning Meeting I, customers and stakeholders will have the opportunity to identify their transmission needs driven by Public Policy Mandates for consideration in the Planning Process. In addition, customers and stakeholders may also submit their transmission needs driven by Public Policy Mandates to the Transmission Provider in writing, for up to two weeks following Planning Meeting I.

The Transmission Provider encourages customers and other stakeholders to submit any proposed modifications to previously-provided customer data and assumptions so that such changes may be considered in the Transmission Provider's Planning Process; the Transmission Provider requires notification of any proposed changes, in writing.

### **5.2.2 Posting I**

After completion of the system assessment, the Transmission Provider will post the availability of: a) a summary of its system assessment results, subject to applicable confidentiality protections, for the upcoming 10-year planning horizon (consistent with section III.2.2.2), b) a summary of the identified conceptual solutions (consistent with section III.2.3.1). Following the completion of any identified high priority Economic Studies, the Transmission Provider will post the availability of the initial results of such studies (consistent with section III.3).

### **5.2.3 Planning Meeting II**

During Planning Meeting II, the Transmission Provider will present for discussion and comment the draft plans of service, cost estimates, and economic analyses developed pursuant to section III.2.4.1. The availability of these draft plans, estimates and analyses will be posted prior to Planning Meeting II. These draft plans will include those to address reliability needs and to meet transmission and interconnection service requests that affect the Transmission Provider's system. The Transmission Provider also will present for discussion and comment the selected transmission needs driven by Public Policy Mandates that affect its own system. Further, the Transmission Provider will identify for possible inclusion in the NorthernGrid planning process those draft plans that affect more than the Transmission Provider's system.

In accordance with section III.3, the Transmission Provider will also present for discussion and comment the initial results of the high priority Economic Studies identified in section III.3 and which were previously posted.

### **5.2.4 Posting II**

Consistent with section III.2.5, the Transmission Provider will post a draft of the latest update to the BPA Plan for review and comment. Comments will be considered in

the development of the final BPA Plan. The final BPA Plan will be posted at the conclusion of the Planning Process.

### **5.2.5 Additional Meetings or Postings**

In addition to regularly scheduled meetings with customers and interested Persons described in this section III.5, the Transmission Provider will provide additional opportunity for coordination and participation with customers and interested Persons. Such meetings may be held in coordination with the NorthernGrid planning process as provided in Part IV. It is anticipated that the Transmission Provider, either in conjunction with NorthernGrid or separately, will endeavor to meet no less frequently than annually with sub-regional planning groups and adjacent transmission providers that are not party to the NorthernGrid Planning Agreement.

### **5.2.6 Meeting Notification**

No less than 15 calendar days prior to any Planning Meeting, the Transmission Provider will notify the BPA Transmission Planning Interested Persons List of the meeting by e-mail. The Transmission Provider will also post notice of the meeting on the System Planning page of its OASIS website. Notification will include agenda, meeting location, date, time, and information about any telephone or web-based participation. The Transmission Provider will provide such notification to neighboring sub-regional planning groups and adjacent transmission providers. The Transmission Provider will endeavor to post updates to meeting agendas on the System Planning page of its OASIS website.

## **5.3 Access to and Use of Replication Data from Transmission Provider**

The Transmission Provider shall use reasonable efforts to provide, or have provided, Replication Data to any customer or interested Person upon receipt by the Transmission Provider of written request for such Replication Data. Access to and use of any Replication Data shall be subject to applicable confidentiality restrictions, applicable legal restrictions, and any restrictions on access or use reasonably imposed by the Transmission Provider. Further, such access by such entities to such data that the Transmission Provider has received from any other entity may be subject to any restrictions on access to such data imposed by such entity. For example, any access to data such as Replication Data that constitutes WECC base case data by any entity is subject to any restrictions on access to data imposed by WECC.

Any customer or interested Person that receives any Replication Data from the Transmission Provider shall use such Replication Data only for the purpose of evaluating the results of the Transmission Provider's planning studies performed pursuant to this Attachment K that underlie the BPA Plan.

## **6. Information Exchange**

### **6.1 Customer Information**

Customers will submit the following information to the Transmission Provider by

March 1 annually. The Transmission Provider and any other entity providing projected or forecasted data with respect to any load, generating resource (or any addition, upgrade, retirement or environmental or other operating restriction with respect to such resource), demand response resource, or need for transmission service shall use reasonable efforts to provide a good faith projection or forecast thereof. The Transmission Provider will establish a business practice regarding the format and procedures for submission of data, and other matters concerning the data to be submitted.

#### **6.1.1 Network Customer Data**

Each Network Customer shall provide to the Transmission Provider the following data:

- (i) forecast information for load and resources for at least the following 10- year period. Such forecast information shall include the amount and location of projected load growth, load characteristics, and good faith estimates of resource size, location, and type of generation for resource requirements;
- (ii) identification of projected demand response reductions; and
- (iii) any other data reasonably requested by the Transmission Provider from such Network Customer in connection with planning activities pursuant to this Attachment K.

Any data to be provided by a Network Customer pursuant to this section III.6.1.1 is in addition to and does not substitute for any data such Network Customer is otherwise required to provide to the Transmission Provider pursuant to NERC Standards or under other sections of the OATT, unless otherwise agreed in writing by the Transmission Provider.

#### **6.1.2 Point-to-Point Customer Data**

Any Point-to-Point Customer and any entity that receives Grandfathered Transmission Service from the Transmission Provider shall provide to the Transmission Provider the following data:

- (i) projections of need for Point-to-Point Transmission Service or other transmission service for at least the following 10-year period, including transmission capacity, duration, receipt and delivery points, and location of generation sources and sinks;
- (ii) any other data reasonably requested by the Transmission Provider from such Point-to-Point Transmission Customer or Grandfathered Transmission Service Customer in connection with planning activities pursuant to this Attachment K

Any data to be provided by a Point-to-Point Customer or Grandfathered Transmission Service Customer pursuant to this section III.6.1.2 is in addition to and does not substitute for any data such customer is otherwise required to provide to the Transmission Provider pursuant to NERC Standards or under other sections of the OATT,

unless otherwise agreed in writing by the Transmission Provider.

## **6.2 Demand Response Resource Data**

### **6.2.1 Customer Demand Resources**

Any stakeholder may provide to the Transmission Provider the following data (“Demand Response Resource Data”) with respect to any demand response resource or Non-Transmission Alternative:

(i) existing and planned demand response resources and any other Non-Transmission Alternatives and their impacts on forecasted demand and peak demand reduction; and

(ii) any other data reasonably requested from such stakeholder by Transmission Provider in connection with planning activities pursuant to this Attachment K.

Loads and resources submitted under sections III.6.1 and III.6.2 are modeled in base cases and are therefore included on a comparable basis in system assessments performed in accordance with section III.2.2.1, and in other studies.

### **6.2.2 Transmission Provider Demand Resources**

As part of planning solutions for identified Transmission Provider’s Needs on its system in accordance with section III.2.3.1(a), the Transmission Provider will conduct an Agency-level assessment of whether a Non-Transmission Alternative may be developed to address the Need. The Transmission Provider will determine, using the criteria listed in section III.2.5.1, above, whether to implement any such Non-Transmission Alternative.

## **6.3 Use of Data**

Any data may be used by the Transmission Provider without restriction (but subject to any applicable confidentiality restrictions) in its planning activities under this Attachment K and in the Transmission Provider’s other planning activities or studies, such as studies in response to requests for transmission service or interconnection.

The Transmission Provider shall have no obligation under this Attachment K or the OATT to evaluate the validity or accuracy of any data but may so evaluate the validity or accuracy of any such data if the Transmission Provider determines such evaluation to be appropriate and reasonable. Similarly, the Transmission Provider shall have no obligation to use any data for any purpose under this Attachment K that Transmission Provider determines to be inappropriate or unreasonable for such use and may, in lieu thereof, substitute data that the Transmission Provider determines to be appropriate and reasonable for such use.

## **6.4 Critical Information and Confidential Information**

The Transmission Provider will maintain a business practice with input from



customers and stakeholders regarding confidentiality restrictions for critical information and confidential information. The business practice will include requirements for customer and stakeholder access to such information in the Planning Process.

**6.4.1** Nothing in this Section 6 shall require (i) any entity to violate any obligation imposed on it pursuant to statute or regulation to restrict disclosure of sensitive information, including critical energy infrastructure information (CEII), or (ii) the Transmission Provider to violate any confidentiality obligations imposed on Transmission Provider by WECC as a condition of receipt by Transmission Provider of any WECC Data.

**6.4.2 Transmission Provider Critical Information and Confidential Information**

The BPA Plan and other Transmission Provider studies, data and assumptions may contain confidential information or that would be identified as critical information or CEII. Such confidential information will be included in separate appendices so that the body of such studies and assumptions can be provided to all parties in an open manner.

**7. Dispute Resolution**

For disputes that arise in the planning processes, the Transmission Provider will follow the provisions of Part VI of this Attachment K.

**8. Cost Allocation**

**8.1** For projects affecting the Transmission Provider's and other transmission systems, if the Transmission Provider and other affected transmission system owners are unable to reach agreement on cost allocation through negotiation, the Transmission Provider may use the NorthernGrid planning process, or another subregional planning process applicable to such project develop cost allocation information. The NorthernGrid process is provided for in Part IV and described in the NorthernGrid Planning Agreement. Costs of such projects that are allocated to the Transmission Provider will be allocated to customers in the Transmission Provider's transmission rates as appropriate in rate proceedings under section 7(i) of the Northwest Power Act, 16 U.S.C. § 839e(i).

**8.2** The costs of projects on the Transmission Provider's Transmission System are allocated to transmission rates in rate proceedings under section 7(i) of the Northwest Power Act, 16 U.S.C. § 839e(i). The allocation of costs to transmission rates is described in documents filed by the Transmission Provider in such transmission rate proceedings, including the Administrator's Record of Decision in such proceedings.

**9. Cost Recovery for BPA Planning Process Participation**

For participants within the Transmission Provider's service area, meetings will be held in a central location with minimal costs to participants. If stakeholders are unable to participate in the local Planning Process, the Transmission Provider will provide electronic and hardcopies of all meeting materials upon request.

## PART IV

### NORTHERNGRID MEMBER PLANNING PROCESS

Transmission Provider is Member in the NorthernGrid Member Region and participates in regional planning as a party to the NorthernGrid Planning Agreement. The NorthernGrid Planning Agreement, as it may be amended or revised from time to time by the NorthernGrid Members, is posted on the NorthernGrid Website at the following link: [www.northerngrid.net](http://www.northerngrid.net).

NorthernGrid is an unincorporated association of its Members formed for the purpose of coordinating regional transmission planning for the NorthernGrid Members. The NorthernGrid Member Region is the product of extensive collaboration and negotiation among the NorthernGrid Members. The NorthernGrid Planning Agreement provides a coordinated, open, and transparent process to be used to perform regional transmission planning in the NorthernGrid Member Region in order to provide a single forum to review and analyze, in parallel, the transmission needs of both Commission-jurisdictional utilities and non-jurisdictional utilities. Exhibit A to the NorthernGrid Planning Agreement describes the NorthernGrid Member Planning Process, including the development of the NorthernGrid Regional Transmission Plan, and Exhibit C to the NorthernGrid Planning Agreement includes the NorthernGrid Member Planning Committee Charter. The regional transmission planning process occurs over a two-year planning cycle beginning on January 1, 2020, and each even numbered year thereafter.

The NorthernGrid Member Planning Agreement is subject to change through external coordination and negotiation among the NorthernGrid Members. Amendments to the NorthernGrid Member Planning Process may be implemented prior to the adoption of the tariff revisions through a Terms and Conditions proceeding. Transmission Provider expects to align any future amendments to the NorthernGrid Member Planning Process among all of the NorthernGrid Members. To the extent feasible, Transmission Provider will provide notice and opportunity for stakeholder input regarding potential planning process changes prior to agreeing to amendments.

**PART V****COORDINATION WITH THE WESTERN INTERCONNECTION PLANNING PROCESS (WECC)**

WECC coordinates aspects of Western Interconnection planning as follows:

- a. WECC develops the Western Interconnection wide data bases for transmission planning analysis such as power flow and stability studies.
- b. WECC also maintains a data base for reporting the status of significant planned projects throughout the Western Interconnection.
- c. WECC promotes coordination of significant planned projects through its WECC Project Coordination Process. These procedures are implemented by the project sponsor within its planning process or by a Western Interconnection regional or “sub-regional” planning group at the request of a project sponsor.
- d. The WECC Procedure for Path Rating process for coordination of path ratings, including consideration of adverse impacts on existing paths.

The primary planning coordination forums in WECC include the RAC or its subcommittees. These committees are to meet at least three times each year and are responsible for developing materials for the WECC coordination activities listed above. Individual entities can participate in planning at the WECC level by attending meetings of these committees and sub-committees and reviewing and commenting on proposed transmission projects and policies. Individual entities can participate in the majority of WECC activities without being a member of WECC although there are many privileges that come with membership such as access to data bases and committee voting rights.

Western Interconnection wide economic studies are conducted by a committee or taskforce formed by WECC RAC. WECC provides the following functions in relation to Economic Studies in the Transmission Provider transmission planning process:

- a. Development and maintenance of the west-wide economic study database.
- b. Performance studies based on the WECC annual study program priorities.

Additional discussion regarding WECC Western Interconnection “regional” and Western Interconnection “subregional” project coordination may be found in the WECC document describing project coordination and path rating process.

**PART VI.****DISPUTE RESOLUTION**

Disputes among NorthernGrid Members that are within the scope of the NorthernGrid Planning Agreement shall be addressed through the applicable dispute resolution provisions of that agreement. However, nothing in this Attachment K restricts the rights of any Person to file a Complaint with the Commission under relevant provisions of the Federal Power Act.

Disputes that are not within the scope of NorthernGrid Planning Agreement but that arise out of Attachment K between a Transmission Provider and one or more of its Transmission Customers shall be addressed pursuant to section 12 (Dispute Resolution Procedures) of the OATT.

**APPENDIX A****DEFINITIONS**

The following terms shall have the following definitions when used in this Attachment K. Terms derived from the NorthernGrid Planning Agreement that are used in this Attachment K are provided for in Appendix B to this Attachment K for convenience, and are subject to amendment as provided for in Part IV of this Attachment K. Other terms defined elsewhere in this OATT and used in this Attachment K shall have the meanings set forth in the OATT.

- A.1** “BPA Plan” means the plan described in section III.2.5 of this Attachment K.
- A.2** “BPA Transmission Planning Interested Persons List” means that list maintained pursuant to section III.5.1 of this Attachment K.
- A.3** “Commission” means the Federal Energy Regulatory Commission or any successor entity.
- A.4** “Demand Response Resource Data” has the meaning set forth in section III.6.2.
- A.5** “Economic Study” means a study of Transmission Provider’s Transmission System, separately or in conjunction with study of other transmission systems, to evaluate (i) congestion or (ii) the integration on an aggregated local, Western Interconnection-wide (or Western Interconnection “sub-regional”) basis of new generation resources or loads.
- A.6** “Grandfathered Transmission Service” means transmission service provided under non-OATT transmission contracts.
- A.7** “NERC” means North America Electric Reliability Corporation or its successor.
- A.8** “Pacific Northwest” means the (i) sub region within the Western Interconnection comprised of Alberta, British Columbia, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming and (ii) any portions of the area defined in 16 U.S.C. § 839a(14) that are not otherwise included in (i).
- A.9** “Planning Process” means the BPA planning process described in Part III of this Attachment K.
- A.10** “Reliability Assessment Committee” means the WECC Reliability Assessment Committee.
- A.11** “Replication Data” means basic criteria, assumptions and data necessary to replicate the results of Transmission Provider’s planning studies performed pursuant to this Attachment K that underlie the BPA Plan.
- A.12** “Transmission Provider’s Need” means:
- (i) any projected inability of the Transmission Provider to serve (anticipated to occur during the planning horizon), consistent with the Transmission Provider’s Planning Criteria:
    - (a) its network load and native load customer obligations, if any, as those terms are defined in the Transmission Provider’s Open Access Transmission Tariff; and

- (b) other existing long-term firm transmission obligations.
  - (ii) any transmission need driven by Public Policy Mandates selected by the Transmission Provider for further evaluation in accordance with Part III section 2.1.7 of this Attachment.
- A.13** “Transmission Provider’s Planning Criteria” means the then current planning standards that the Transmission Provider shall apply, as provided in Part III section 3 of this Attachment in any system assessment.
- A.14** “Western Electricity Coordinating Council” or “WECC” means the Western Electricity Coordinating Council or any successor entity.

## APPENDIX B

### TERMS DEFINED IN THE NORTHERNGRID PLANNING AGREEMENT THAT ARE USED IN THIS ATTACHMENT K

The following terms, which are used in this Attachment K, are derived from the NorthernGrid Planning Agreement and are provided for in Appendix B to this Attachment K for convenience. As explained in Part IV of this Attachment K, the NorthernGrid Planning Agreement, as it may be amended or revised from time to time by the NorthernGrid Members, is posted on the NorthernGrid Website at the following link: [www.northerngrid.net](http://www.northerngrid.net), and amendments to the NorthernGrid Member Planning Process may be implemented prior to the adoption of the tariff revisions through a Terms and Conditions proceeding. The NorthernGrid Planning Agreement, as it may be amended, contains additional terms and definitions pertaining to the NorthernGrid process.

#### 1.1 Member or Members

“Member” means a Person that has satisfied the eligibility requirements set forth in the Planning Agreement to become a member in NorthernGrid. “Members” is a collective reference to each Member.

#### 1.2 Member Planning Committee

“Member Planning Committee” means the committee comprised of the representatives identified pursuant to the Member Planning Committee Charter that carries out transmission planning tasks assigned to such committee in the Planning Agreement according to the Member Planning Committee Charter.

#### 1.3 Member Planning Committee Charter

“Member Planning Committee Charter” means the document attached as Exhibit C to the Planning Agreement that defines the manner in which the Member Planning Committee operates.

#### 1.4 Member Region

“Member Region” or “NorthernGrid Member Region” is comprised of the existing or proposed transmission facilities in the Western Interconnection of its Members.

#### 1.5 Non-Transmission Alternative

“Non-Transmission Alternative” means a solution that is proposed for consideration, in the planning process, as an alternative to transmission facilities.

#### 1.6 NorthernGrid

“NorthernGrid” means the association described in the body of the Planning Agreement.

#### 1.7 NorthernGrid Website

“NorthernGrid Website” is [www.northerngrid.net](http://www.northerngrid.net).

### **1.8 Person**

“Person” means an individual, corporation, cooperative corporation, municipal corporation, quasi-municipal corporation, joint operating entity, limited liability company, mutual association, partnership, limited partnership, limited liability partnership, association, joint stock company, trust, unincorporated organization, government entity or political subdivision thereof (including a federal power marketing administration), tribes, or organization recognized as a legal entity by law in the United States or Canada.

### **1.9 Public Policy Mandate(s)**

“Public Policy Mandate” means any applicable public policy requirement established through one or more enacted statutes or regulations promulgated by a relevant local, state, or federal jurisdiction within the Member Region. “Public Policy Mandates” is a collective reference to each “Public Policy Mandate.”

### **1.10 Western Interconnection**

“Western Interconnection” refers to the western interconnected electric grid in North America. It spans 14 western states in the United States, the Canadian provinces of British Columbia and Alberta, and the northern portion of Baja California in Mexico.



**ATTACHMENT L**

**Standard Large Generator Interconnection Procedures (LGIP), including Standard Large  
Generator Interconnection Agreement (LGIA)**

**STANDARD LARGE GENERATOR  
INTERCONNECTION PROCEDURES (LGIP)**

**including**

**STANDARD LARGE GENERATOR  
INTERCONNECTION AGREEMENT (LGIA)**

**Standard Large Generator**  
**Interconnection Procedures (LGIP)**  
**(Applicable to Generating Facilities that exceed 20 MW)**

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**Section 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 Transmission Provider's Transmission System that may be affected by the proposed interconnection.

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

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

**Ancillary Services** shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of 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 Transmission Provider or Interconnection Customer.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Standard Large Generator Interconnection Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Standard Large Generator Interconnection Agreement.

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

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

**Cluster** shall mean a group of one or more Interconnection Requests that are studied together for the purpose of conducting a Cluster Study.

**Cluster Area** shall have the meaning set forth in Sections 6.5 and 7.4 of this LGIP.

**Cluster Request Window** shall mean the period of time during which Transmission Provider shall accept Interconnection Requests for a Cluster Study.

**Cluster Re-Study** shall mean a re-study of a Cluster Study conducted pursuant to Sections 6.7 and 7.6 of this LGIP.

**Cluster Re-Study Meeting** shall mean the meeting held to discuss the results of a Cluster Re-Study pursuant to Section 6.7 and 7.6 of this LGIP.

**Cluster Re-Study Report** shall mean the report issued following completion of a Cluster Re-Study pursuant to Sections 6.7 and 7.6 of this LGIP.

**Cluster Scoping Meeting** shall mean the meeting between representatives of Interconnection Customer and Transmission Provider conducted for the purpose of discussing general information regarding the applicable Cluster Study, including size (e.g., MW and number of Interconnection Requests in the Cluster), a general overview of the Cluster Study process, and to exchange information, including transmission data and earlier study and Cluster Study evaluations, that would be reasonably expected to affect the applicable Cluster Study.

**Cluster Study** shall mean the evaluation of a Cluster in the Phase One Cluster Study or Phase Two Cluster Study, including any Cluster Re-Study, as described in more detail in Sections 6 and 7 of this LGIP.

**Cluster Study Report** shall mean the report issued following completion of a Cluster Study pursuant to Sections 6.6 and 7.5 of this LGIP.

**Cluster Study Report Meeting** shall mean the meeting held to discuss the results of a Cluster Study pursuant to Sections 6.6 and 7.5 of this LGIP.

**Clustering** shall mean the process whereby a group of Interconnection Requests are studied together, instead of serially, as described in more detail in Sections 6 and 7 of this LGIP.

**Co-Located Resource** shall mean a Generating Facility that is co-located with one or more Generating Facilities on the same site and behind the same Point of Interconnection.

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

**Commercial Operation Date** of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the Standard Large Generator Interconnection Agreement.

**Commercial Readiness Deposit** shall mean a deposit paid in lieu of submitting evidence of a Commercial Readiness Milestone Option.

**Commercial Readiness Milestone Option** shall mean the options set forth in Section 6.6 of the LGIP.

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

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for re-studies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

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

**Customer Engagement Window** shall have the meaning set forth in Section 6.2 of this LGIP.

**Customer Review Period** shall have the meaning set forth in Sections 6.6 and 7.5 of this LGIP.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Standard Large Generator Interconnection Agreement.

**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 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 Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the transmission service necessary to effect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the Standard Large Generator Interconnection Agreement 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 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 Standard Large Generator Interconnection Agreement to possess black start capability.

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

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes 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 Commission) 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, pandemic or endemic, 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 for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**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.



**Generating Facility Replacement Request** shall mean an Interconnection Customer's request, in accordance with the Tariff, to replace of one or more aged generating units, at an existing Generating Facility interconnected with Transmission Provider's Transmission System.

**Generating Facility Repower Request** shall mean an Interconnection Customer's request, in accordance with the Tariff, to replace one or more aged components of a generating unit, at an existing Generating Facility interconnected with Transmission Provider's Transmission System.

**Generation Model and Performance Attestation** shall mean a signed statement (1) attesting that Interconnection Customer accepts Transmission Provider's use of generic performance models for the Phase One Cluster Study; (2) acknowledging that validated detailed models required for the Phase Two Cluster Study must meet Transmission Provider's Technical Requirements for Interconnection and represent the performance characteristics of the Generating Facility; and (3) acknowledging that the proposed Generating Facility must be designed to meet performance requirements in Transmission Provider's Technical Requirements for Interconnection.

**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 Interconnection Customer reasonably expects it will be ready to begin use of Transmission Provider's Interconnection Facilities to obtain back feed power.

**Interconnection Customer** shall mean any entity, including Transmission Provider, Transmission Owner or any of the Affiliates or subsidiaries of either, that proposes to interconnect its Generating Facility with Transmission Provider's Transmission System.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Standard Large Generator Interconnection Agreement, 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 Transmission Provider's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean Transmission Provider's Interconnection Facilities and 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 Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities by Interconnection Customer and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades. Multiple Generating Facilities located on the same site of Interconnection Customer may use Interconnection Facilities.

**Interconnection Facilities Study** shall mean a study conducted by Transmission Provider or a third party consultant for Interconnection Customer to determine a list of facilities (including Transmission Provider's Interconnection Facilities and Network Upgrades as identified in the Phase Two Cluster Study), the cost of those facilities, and the time required to interconnect the Generating Facility with Transmission Provider's Transmission System. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Standard Large Generator Interconnection Procedures, in accordance with the Tariff, 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 Transmission Provider's Transmission System.

**Interconnection Service** shall mean the service provided by Transmission Provider associated with interconnecting Interconnection Customer's Generating Facility to 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 Standard Large Generator Interconnection Agreement and, if applicable, Transmission Provider's Tariff.

**Interconnection Study** shall mean any of the following studies: the Phase One Cluster Study, the Phase Two Cluster Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures.

**Joint Operating Committee** shall be a group made up of representatives from Interconnection Customers and Transmission Provider to coordinate operating and technical considerations of Interconnection Service.

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

**Late-Stage Project** shall have the meaning set forth in Attachment R.

**Load-Serving Entity** shall mean any entity, including a load aggregator or power marketer, that serves end-users within a control area and has been granted the authority or has an obligation pursuant to state or local law, regulation, or franchise to sell electric energy to end-users located within the control area.

**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 Standard Large Generator Interconnection Agreement 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 an equal or later Queue Position.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Standard Large Generator Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

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

**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 Interconnection Customer to integrate its Large Generating Facility with Transmission

Provider's Transmission System (1) in a manner comparable to that in which 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 Transmission Provider's Transmission System required at or beyond the point at which the Interconnection Facilities connect to Transmission Provider's Transmission System to accommodate the interconnection of the Large Generating Facility to 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 Standard Large Generator Interconnection Agreement or its performance.

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

**Permissible Technological Advancement** shall mean any new, upgraded, updated, or modified technological advancement proposed by an Interconnection Customer for incorporation in the design, construction, or operation of generation facilities that will not change the electrical characteristics of the Interconnection Request and will not require extensive studies to determine whether such a proposed change constitutes a Material Modification. Such permissible changes may include advancements to turbines, inverters, plant supervisory controls, or other technological advancements to equipment that will provide cost efficiency and/or electrical performance benefits, or, may affect a generating facility's ability to provide ancillary services. However, such Permissible Technological Advancements do not include any additions to or change in the generation technology or fuel type. For all Permissible Technological Advancements, Interconnection Customer must demonstrate that the proposed incorporation of the technological advancement would result in electrical performance that is equal to or better than the electrical performance expected with the technology originally proposed with Interconnection Customer's Interconnection Request.

**Phase One Cluster Study** shall mean a Cluster Study, including any Cluster Re-Study, as described in Section 6 of this LGIP.

**Phase One Cluster Study Agreement** shall mean the form of agreement contained in Appendix 2 to this LGIP for conducting the Phase One Cluster Study.

**Phase Two Cluster Study** shall mean a Cluster Study, including any Cluster Re-Study, as described in Section 7 of this LGIP.

**Phase Two Cluster Study Agreement** shall mean the form of agreement contained in Appendix 3 to this LGIP for conducting the Phase Two Cluster Study.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where Interconnection Customer's Interconnection Facilities connect to Transmission Provider's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to Transmission Provider's Transmission System.

**Provisional Interconnection Service** shall mean Interconnection Service provided by Transmission Provider associated with interconnecting Interconnection Customer's Generating Facility to Transmission Provider's Transmission System and enabling that Transmission System to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Provisional Large Generator Interconnection Agreement and, if applicable, the Tariff.

**Provisional Large Generator Interconnection Agreement** shall mean the interconnection agreement for Provisional Interconnection Service established between Transmission Provider and/or the Transmission Owner and Interconnection Customer. This agreement shall take the form of the Standard Large Generator Interconnection Agreement, modified for provisional purposes.

**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 Transmission Provider.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Large Generator Interconnection Agreement, 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.

**Resource Plan** shall mean any process authorized or required by Applicable Laws and Regulations for an Investor-Owned Utility, or for other Load-Serving Entities any process established by its applicable authority which details future resource needs and identifies specific resources to meet those needs for the selection of generating resources.

**Resource Solicitation Process** shall mean any process authorized or required by Applicable Laws and Regulations for an Investor-Owned Utility, or for other Load-Serving Entity any process established by its applicable authority for the acquisition of a Network Resource or acquisition of a resource by a Load-Serving Entity.

**Scalable Plan Block** shall have the meaning as described in Section 4.2.4.

**Site Control** shall mean the exclusive land right to develop, construct, operate, and maintain the Generating Facility over the term of expected operation of the Generating Facility. Site Control may be demonstrated by documentation establishing: (1) ownership of, a leasehold interest in, or a right to develop a site of sufficient size to construct and operate the Generating Facility; (2) an option to purchase or acquire a leasehold interest in a site of sufficient size to construct and operate the Generating Facility; or (3) documentation that clearly demonstrates the right of Interconnection Customer to exclusively occupy a site of sufficient size to construct and operate the Generating Facility. Site Control for any Co-Located Resource is demonstrated by a contract or other agreement that allows for shared land use for all Co-Located Resources that meet the provisions of this Site Control definition.

**Small Generating Facility** shall mean a Generating Facility that has a Generating Facility Capacity of no more than 20 MW.

**Stand Alone Network Upgrades** shall mean Network Upgrades that are not part of an Affected System that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Both Transmission Provider and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement. If Transmission Provider and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, Transmission Provider must provide Interconnection Customer a written technical explanation outlining why Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**Standard Large Generator Interconnection Agreement (LGIA)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in Transmission Provider's Tariff.

**Standard Large Generator Interconnection Procedures (LGIP)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are included in Transmission Provider's Tariff.

**Surplus Interconnection Customer** shall mean an entity that proposes to utilize or transfer Surplus Interconnection Service in accordance with Section 3.3 of these procedures.

**Surplus Interconnection Service** shall mean any unneeded portion of Interconnection Service established in a Large Generator Interconnection Agreement, such that if Surplus Interconnection Service is utilized, the total amount of Interconnection Service at the Point of Interconnection would remain the same.

**Surplus Interconnection Service Request** shall mean a Surplus Interconnection Customer's request, in accordance with Section 3.3 of the LGIP, to utilize or transfer Surplus Interconnection Service at an existing Point of Interconnection.

**Surplus Scoping Meeting** shall mean the meeting between representatives of the Surplus Interconnection Customer and Transmission Provider conducted for the purpose of discussing the Surplus Interconnection Service Request and exchanging information.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) 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 Transmission Provider's Transmission System or on other delivery systems or other generating systems to which Transmission Provider's Transmission System is directly connected.

**Tariff** shall mean Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as amended or supplemented from time to time, or any successor tariff.

**Transition Projects** shall have the meaning set forth in Attachment R.

**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 Standard Large Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** shall mean the Bonneville Power Administration that owns, controls, or operates facilities used for the transmission of electric energy in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from Transmission Provider.

**Transmission Provider's Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by Transmission Provider from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Standard Large Generator Interconnection Agreement, 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 Transmission Provider or Transmission Owner that are used to provide transmission service under the Tariff.

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

**Withdrawal Charge** shall mean the charge assessed by Transmission Provider to an Interconnection Customer that chooses to withdraw or is deemed withdrawn from Transmission Provider's interconnection queue or whose Generating Facility does not otherwise reach Commercial Operation. The calculation of the Withdrawal Charge is set forth in Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor

## **Section 2. Scope and Application**

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

Sections 2 through 15 apply to processing any Interconnection Request pertaining to a Large Generating Facility. Attachment R applies to any Transition Project or Late-Stage Project.

### **2.2 Comparability**

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

Affiliates or others.

### **2.3 Base Case Data**

Transmission Provider shall maintain base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list on either its OASIS site or a password-protected website, subject to confidentiality provisions in LGIP Section 13.1. In addition, Transmission Provider shall maintain network models and underlying assumptions on either its OASIS site or a password-protected website. Such network models and underlying assumptions should reasonably represent those used during the most recent interconnection study and be representative of current system conditions. If Transmission Provider posts this information on a password-protected website, a link to the information must be provided on Transmission Provider's OASIS site. Transmission Provider is permitted to require that Interconnection Customers, OASIS site users and password-protected website users sign a confidentiality agreement before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Transmission Provider reserves the right to withhold Critical Energy Infrastructure Information if the disclosure of such information would waive protections against public disclosure pursuant to 16 U.S.C. § 824o-1 as may be amended or replaced from time to time, or violate reliability standards prohibiting disclosure adopted pursuant to 16 U.S.C. § 824o as may be amended or replaced from time to time. Such databases and lists, hereinafter referred to as Base Cases, shall include all applicable (1) generation projects and (2) transmission projects, including merchant transmission projects that are proposed for the Transmission System for which a transmission expansion plan has been submitted and approved by the applicable authority.

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

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

### **2.5 EIM Requirements**

Interconnection Customer shall have a continuing duty to comply with Attachment Q of the Tariff, as applicable.

## **Section 3. Interconnection Requests**

### **3.1 Interconnection Requests**

An Interconnection Customer shall submit to Transmission Provider, during a Cluster Request Window, an Interconnection Request and a non-refundable application fee of \$10,000.

Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. Interconnection Customer must submit the application fee with each



Interconnection Request even when more than one request is submitted for a single site. Interconnection Customer may submit Co-Located Resources as separate Interconnection Requests or a single Interconnection Request.

Interconnection Customer may request a Point of Interconnection to be studied no later than the execution of the Phase One Cluster Study Agreement.

For purposes of clustering Interconnection Requests, if Interconnection Customer proposes a Point of Interconnection, Transmission Provider will determine the Point of Interconnection at its sole discretion to improve: the reliability benefits, cost and/or benefits of the interconnection for the Cluster Area. In the event that Transmission Provider determines that a requested Point of Interconnection is not feasible or may need to be relocated, Transmission Provider will make reasonable efforts to consult with the impacted Interconnection Customer, so long as these meetings will not delay the issuance of the Phase One Cluster Study Report.

Transmission Provider shall have a process in place to consider requests for Interconnection Service below the Generating Facility Capacity. These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of Interconnection Facilities and Network Upgrades, and associated costs, but may be subject to other studies at the full Generating Facility Capacity to ensure safety and reliability of the system, with the study costs borne by Interconnection Customer. If after the additional studies are complete, Transmission Provider determines that additional Network Upgrade are necessary, then Transmission Provider must: (1) specify which additional Network Upgrade costs are based on which studies; and (2) provide a detailed explanation of why the additional Network Upgrades are necessary. Any Interconnection Facility and/or Network Upgrade costs required for safety and reliability also would be borne by Interconnection Customer. Interconnection Customers may be subject to additional control technologies as well as testing and validation of those technologies consistent with Article 6 of the LGIA. The necessary control technologies and protection systems shall be established in Appendix C of that executed LGIA.

### **3.2 Identification of Types of Interconnection Services**

At the time the Interconnection Request is submitted, Interconnection Customer must request either Energy Resource Interconnection Service or Network Resource Interconnection Service, as described; provided, however, any Interconnection Customer requesting Network Resource Interconnection Service may also request that it be concurrently studied for Energy Resource Interconnection Service, up to the point when an Interconnection Facility Study Agreement is executed. Interconnection Customer may then elect to proceed with Network Resource Interconnection Service or to proceed under a lower level of interconnection service to the extent that only certain

upgrades will be completed.

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

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

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

### **3.2.2 Network Resource Interconnection Service**

**3.2.2.1 The Product.** Transmission Provider must conduct the necessary studies and construct the Network Upgrades needed to integrate the Large Generating Facility (1) in a manner comparable to that in which Transmission Provider integrates its generating facilities to serve native load customers; or (2) in an ISO or RTO with market based congestion management, in the same manner as Network Resources. Network Resource Interconnection Service Allows Interconnection Customer's Large Generating Facility to be designated as a Network Resource, up to the Large Generating Facility's full output, on the same basis as existing Network Resources interconnected to Transmission Provider's Transmission System, and to be studied as a Network Resource on the assumption that such a designation will occur.

**3.2.2.2 The Study.** The Interconnection Study for Network Resource Interconnection Service shall assure that

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

### **3.3 Utilization of Surplus Interconnection Service**

This process allows an existing Interconnection Customer (Interconnection Customer whose Generating Facility is already interconnected to Transmission Provider's Transmission System) to utilize or transfer Surplus Interconnection Service at an existing Point of Interconnection. The existing Interconnection Customer or one of its affiliates shall have priority to utilize Surplus Interconnection Service. If the existing Interconnection Customer or one of its affiliates does not exercise its priority, then that service may be made available to other potential Surplus Interconnection Customers that are not affiliated with the existing Interconnection Customer.

#### **3.3.1 No Applicability to Transmission Service**

Nothing in this Section shall constitute a request for transmission service or confer upon a Surplus Interconnection Customer any right to receive transmission service.

#### **3.3.2 Surplus Interconnection Service Requests**

Studies for Surplus Interconnection Service shall consist of reactive power, short circuit/fault duty, stability analyses, and any other appropriate studies. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied. If the Surplus Interconnection Service was not

studied under off-peak conditions, off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection Service. If the original System Impact Study or Phase Two Cluster Study are not available for the Surplus Interconnection Service, both off-peak and peak analysis may need to be performed for the existing Generating Facility associated with the request for Surplus Interconnection Service. The reactive power, short circuit/fault duty, stability, and steady-state analyses for Surplus Interconnection Service will identify any additional Interconnection Facilities and/or Network Upgrades necessary.

### **3.3.3 Initiating a Surplus Interconnection Service Request**

Surplus Interconnection Customer identified in 3.3 must first submit, in writing to Transmission Provider, a Surplus Request. A valid request will consist of the following:

- (A) a cover letter stating: (i) the identity of Surplus Interconnection Customer, (ii) the existing Point of Interconnection that Surplus Interconnection Customer proposes to use for Surplus Interconnection Service, (iii) the identity of the existing Interconnection Customer, (iv) if Surplus Interconnection Customer is any entity other than the existing Interconnection Customer, Surplus Interconnection Customer's affiliation, if any, to the existing Interconnection Customer, (v) the amount of Surplus Interconnection Service Surplus Interconnection Customer seeks to use, and (vi) the expected In-Service Date of the Surplus Interconnection generating facility;
- (B) (i) A deposit of \$10,000, (ii) evidence of Site Control in a form reasonably acceptable to Transmission Provider, and (iii) Demonstration that the site for which Surplus Interconnection Customer has Site Control is suitable for Surplus Interconnection Customer's Generating Facility in a form reasonably acceptable to Transmission Provider, including evidence that such site is sufficient for Surplus Interconnection Customer's Generating Facility in accordance with Good Utility Practice. Such deposit shall be applied toward any Surplus Interconnection Studies pursuant to the Surplus Interconnection Service Request.
- (C) Modeling data (in a format acceptable to Transmission Provider) and project one line diagram for the Surplus Interconnection Service Request;
- (D) A letter of intent, signed by the existing Interconnection Customer, indicating: (i) the existing Interconnection Customer's intent to allow a specified portion of its Interconnection Service to be used by Surplus Interconnection Customer, (ii) the specified amount of Surplus Interconnection Service that the existing

Interconnection Customer is making available, (iii) the date when the Surplus Interconnection Service will be available, (iv) the conditions under which such Surplus Interconnection Service may be used, and (v) the letter must also include a statement that the existing Interconnection Customer is waiving its priority right, on behalf of itself and any affiliate to utilize the Surplus Interconnection Service, only if Surplus Interconnection Customer is any entity other than the existing Interconnection Customer or an affiliate of the existing Interconnection Customer.

**3.3.4 Acknowledgement of the Surplus Interconnection Service Request**

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

**3.3.5 Surplus Interconnection Service Queue**

Following Transmission Provider's receipt of a completed Surplus Interconnection Service Request, Transmission Provider will process such requests on an expedited basis and separately from other requests pending in its interconnection queue. To do so, however, Surplus Interconnection Customer shall timely provide, to Transmission Provider, such other information as Transmission Provider may reasonably request.

**3.3.6 Deficiencies in the Surplus Interconnection Service Request**

If Surplus Interconnection Customer fails to provide a completed Surplus Interconnection request to Transmission Provider, Transmission Provider will notify Surplus Interconnection Customer of the deficiencies and Surplus Interconnection Customer will have 15 Business Days, from the date on the Notice, to cure any deficiencies. Failure to timely cure all deficiencies will result in a deemed withdrawal of the Surplus Interconnection Service Request.

**3.3.7 Surplus Interconnection Service Scoping Meeting**

Within ten (10) Business Days after Transmission Provider receives a valid Surplus Interconnection Service Request, Transmission Provider shall establish a Surplus Scoping Meeting date. The date must be agreeable to Surplus Interconnection Customer and, if applicable, the existing Interconnection Customer. The date shall be no later than thirty (30) Calendar Days from receipt of the valid Surplus Interconnection Service Request, unless otherwise mutually agreed upon by the Surplus Interconnection Customer or the existing Interconnection Customer, if applicable.

The purpose of the Surplus Scoping Meeting shall be to discuss the Surplus Interconnection Service that the existing Interconnection Customer is making available at such Point of Interconnection, and to exchange information including any studies and transmission data that would reasonably be expected to impact such interconnection. Surplus Scoping Meeting attendees will bring to the meeting any studies that may have been performed for the existing Interconnection Customer, any existing LGIA, and such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting. Meeting attendees will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for it. On the basis of the meeting, Surplus Interconnection Customer shall provide to Transmission Provider its preferred plan of service for its use of Surplus Interconnection Service.

### **3.3.8 Environmental Study Agreement**

As soon as practicable, Transmission Provider shall tender to Surplus Interconnection Customer an environmental study agreement authorizing Transmission Provider, at Surplus Interconnection Customer's expense, to perform environmental review of the proposed surplus interconnection, including review under the National Environmental Policy Act (NEPA), and setting forth Surplus Interconnection Customer's responsibilities in connection with such environmental review. Surplus Interconnection Customer shall execute and return the environmental study agreement within 30 Calendar Days of receipt or its Surplus Interconnection Service Request shall be deemed withdrawn and the unexpended amount of its deposit, if any, shall be returned.

### **3.3.9 Withdrawal of the Surplus Interconnection Service Request**

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

### Dispute Resolution.

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

Transmission Provider shall (i) update the OASIS Surplus Interconnection Queue Position posting and (ii) refund to Surplus Interconnection Customer any portion of Surplus Interconnection Customer's deposit or study payments that exceeds the costs that Transmission Provider has incurred, including interest, calculated from the date the study deposit is received until the date a refund is made, at a rate equivalent to what Transmission Provider would earn on interest income as specified for the most recent Bonneville Transmission rate case and documented in the Transmission Revenue Requirement Study Documentation, or its successor. In the event of such withdrawal, Transmission Provider, subject to the confidentiality provisions of Section 13.1, shall provide, at Surplus Interconnection Customer's request, all information that Transmission Provider developed for any completed study conducted up to the date of withdrawal of the Surplus Interconnection Request.

#### **3.3.10 Surplus Interconnection Service System Impact Study Agreement**

Unless otherwise agreed, following the Surplus Scoping Meeting and provided the existing Interconnection Customer's System Impact Study is available, Transmission Provider will determine if the existing System Impact Study is sufficient to evaluate the request for Surplus Interconnection Service. If the existing System Impact Study is not available, or available but insufficient to enable Transmission Provider to evaluate the Surplus Interconnection Request, then, Surplus Interconnection Customer will be provided a Surplus Interconnection Service System Impact Study (Surplus System Impact Study) Agreement similar in form to that of Appendix 6 of this LGIP) obligating Surplus Interconnection Customer to pay the actual costs of the Surplus System Impact Study.

- 3.3.10.1** Surplus Interconnection Customer shall execute the Surplus System Impact Study Agreement and deliver the executed Surplus System Impact Study Agreement to Transmission Provider no later than thirty (30) Calendar Days after its receipt along with demonstration of Site Control, and a \$50,000 deposit. If Surplus Interconnection Customer does not provide all such technical data when it delivers the Surplus System Impact Study Agreement, Transmission Provider shall notify Surplus Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Surplus System Impact Study Agreement and Surplus Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Surplus System Impact Study Agreement or deposit
- 3.3.10.2** Upon receipt of the executed Surplus System Impact Study Agreement and deposit, Transmission Provider shall initiate the Surplus System Impact Study. The Surplus System Impact Study shall consist of reactive power, short circuit/fault duty, stability analyses, harmonic analysis, and any other studies deemed appropriate by Transmission Provider. As an example, Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied. Transmission Provider shall utilize existing studies to the extent practicable in performing the Surplus System Impact Study. The resulting Surplus System Impact Study report will identify any additional Interconnection Facilities and findings that would affect eligibility for Surplus Interconnection Service (*i.e.* the need for Network Upgrades). Transmission Provider shall use Reasonable Efforts to complete the Surplus System Impact Study and issue the report within ninety (90) Calendar Days after the receipt of the Surplus Interconnection System Impact Study Agreement, all modeling data, and required study deposit. At the request of Surplus Interconnection Customer or at any time Transmission Provider determines that it will not complete the Surplus System Impact Study report within the ninety (90) Calendar Days, Transmission Provider shall notify Surplus Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.

Within ten (10) Business Days of providing a Surplus System Impact Study report to Surplus Interconnection



Customer, Transmission Provider, existing Interconnection Customer and Surplus Interconnection Customer shall meet to discuss the results of the Surplus System Impact Study. Alternatively, Surplus Interconnection Customer may waive this meeting.

### **3.3.11 Surplus Interconnection Service Facilities Study Agreement**

If any Surplus Interconnection Service Facilities and/or control technologies are identified as necessary in the Surplus System Impact Study report for the utilization of the Surplus Interconnection Service, simultaneously with the delivery of the Surplus System Impact Study report to Surplus Interconnection Customer, Transmission Provider shall provide to Surplus Interconnection Customer a Surplus Interconnection Service Facilities (Surplus Facilities) Study Agreement (similar in form to that of Appendix 7 to this LGIP). The Surplus Facilities Study Agreement shall provide that Surplus Interconnection Customer shall compensate Transmission Provider for the actual cost of the Surplus Facilities Study.

Surplus Interconnection Customer shall execute the Surplus Facilities Study Agreement and deliver the executed Surplus Facilities Study Agreement to Transmission Provider within thirty (30) Calendar Days after its receipt, together with an additional \$50,000 deposit to be used in preparation of the Surplus Facilities Study and report.

Transmission Provider shall utilize existing studies to the extent practicable in performing the Surplus Facilities Study. Transmission Provider shall use Reasonable Efforts to complete the Surplus Facilities Study and issue the report within one hundred eighty (180) Calendar Days after the receipt of the Surplus Facilities Study Agreement and required study deposit, with a +/- 10 percent cost estimate contained in the Surplus Facilities Study report. If Transmission Provider is unable to complete the Surplus Facilities Study within the time required, it shall notify Surplus Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.

Within ten (10) Business Days of providing a Surplus Facilities Study to Surplus Interconnection Customer, or other mutually agreed upon date, Transmission Provider, existing Interconnection Customer and Surplus Interconnection Customer shall meet to discuss the results of the Surplus Facilities Study. Alternatively, Surplus Interconnection Customer may waive this meeting.

### **3.3.12 Surplus Interconnection Service Agreement**

Within fifteen (15) Business Days after the date on which

Transmission Provider completes a record of decision under NEPA or other appropriate NEPA document, or the parties have completed the negotiation process, whichever is later, Transmission Provider will decide whether to offer a final Surplus Interconnection Service Agreement to Surplus Interconnection Customer.

If Transmission Provider decides to offer the Surplus Interconnection Customer an executable Surplus Interconnection Agreement, Transmission Provider will also tender an amended LGIA to the existing Interconnection Customer.

Both the Surplus Interconnection Customer and the existing Interconnection Customer shall have 30 Business Days or another mutually agreeable timeframe to sign and return the Surplus interconnection agreement and the amended LGIA respectively. If the Surplus Interconnection Customer or the existing Interconnection Customer does not sign their respective agreements, the Surplus Interconnection Request shall be deemed withdrawn.

After the Surplus Interconnection Service Agreement and the amended LGIA is signed by the parties, Surplus Interconnection Service shall proceed under the provisions of that agreement, and Interconnection Service shall proceed under the provisions of the amended LGIA.

### **3.4 Valid Interconnection Request**

#### **3.4.1 Initiating an Interconnection Request**

An Interconnection Customer requesting to join a Cluster shall submit its Interconnection Request to Transmission Provider within, and no later than, the close of the Cluster Request Window. Transmission Provider shall deem any Interconnection Requests received outside of the Cluster Request Window as invalid. For an Interconnection Customer's Interconnection Request to be valid, Interconnection Customer must submit all of the following:

- (i) A completed application in the form of Appendix 1 (including applicable technical information);
- (ii) A non-refundable application fee required pursuant to Section 3.1 of this LGIP;
- (iii) Evidence of Site Control;
- (iv) Demonstration that the site for which Interconnection Customer has Site Control is suitable for Interconnection Customer's Generating Facility in a form reasonably acceptable to Transmission Provider, including evidence that such site is sufficient for Interconnection Customer's

Generating Facility in accordance with Good Utility Practice, and is effective through the Commercial Operation Date of the Large Generating Facility; and

(v) **Generation Model and Performance Attestation.**

Interconnection Customer shall promptly inform Transmission Provider of any material change in Interconnection Customer's demonstration of Site Control under Section 3.4.1 (iii). If Transmission Provider determines that Interconnection Customer no longer satisfies Site Control due to the material change, then the Interconnection Request is deemed withdrawn.

The expected In-Service Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility shall be no more than the process window for the regional expansion planning period (or in the absence of a regional planning process, the process window for Transmission Provider's expansion planning period) not to exceed seven (7) years from the date the Interconnection Request is received by Transmission Provider, unless Interconnection Customer demonstrates that engineering, permitting and construction of the new Large Generating Facility or increase in capacity of the existing Generating Facility will take longer than the regional expansion planning period. The In-Service Date may succeed the date the Interconnection Request is received by Transmission Provider by a period up to ten (10) years, or longer where Interconnection Customer and Transmission Provider agree, such agreement not to be unreasonably withheld.

**3.4.2 Acknowledgment of Interconnection Request**

Transmission Provider shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the request and attach a copy of the received Interconnection Request to the acknowledgement. Transmission Provider may opt to validate a request before the close of the Cluster Request Window.

**3.4.3 Deficiencies in Interconnection Request**

Interconnection Customer shall provide Transmission Provider all items in Section 3.4.1. An Interconnection Request will not be considered to be a valid request until all items in Section 3.4.1 have been received by Transmission Provider. If an Interconnection Request fails to meet the requirements set forth in Section 3.4.1, Transmission Provider shall notify Interconnection Customer within twenty (20) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request and is deemed withdrawn.

#### **3.4.4 Scoping Meeting**

During the Customer Engagement Window, Transmission Provider shall hold a Cluster Scoping Meeting for all Interconnection Customers whose valid Interconnection Requests were received during the Cluster Request Window.

Transmission Provider shall use Reasonable Efforts to accommodate an Interconnection Customer's request for an individual scoping meeting (Individual Scoping Meeting) if requested by an Interconnection Customer no later than fifteen (15) Business Days from the close of the Cluster Request Window, to the extent that these meetings will not delay the start of the Phase One Cluster Study. Interconnection Customer shall bear any costs for an individual scoping meeting. The purpose of the Individual Scoping Meeting is to provide an opportunity for Interconnection Customer to ask specific questions and provide additional information regarding the Interconnection Request and for Transmission Provider to ask questions specific to the Interconnection Request. If Interconnection Customer provides a requested Point of Interconnection in the application (optional), Transmission Provider may discuss the requested Point of Interconnection at the Individual Scoping Meeting, however, discussions would be limited to general feasibility of the requested Point of Interconnection.

The purpose of the Cluster Scoping Meeting shall be to discuss general information regarding the applicable Cluster Study size (e.g. MW and number of Interconnection Requests in the Cluster), provide a general overview of the Cluster Study process, to exchange information, including transmission data and earlier study and Cluster Study evaluations, that would be reasonably expected to affect the applicable Cluster Study, and to discuss the Cluster materials posted to OASIS pursuant to Section 6.2. If Interconnection Customer provides a requested Point of Interconnection in the application (optional), Transmission Provider will use Reasonable Efforts to discuss the Point of Interconnection generally at the Cluster Scoping Meeting, to the extent that these meetings will not delay the start of the Phase One Cluster Study. Transmission Provider and Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. The duration of the meeting shall be sufficient to accomplish its purpose.

#### **3.4.5 Environmental Study Agreement**

As soon as practicable, Transmission Provider shall tender to Interconnection Customer an environmental study agreement

authorizing Transmission Provider, at Interconnection Customer's expense, to perform environmental review of the proposed interconnection, including review under the NEPA, and setting forth Interconnection Customer's responsibilities in connection with such environmental review. Interconnection Customer shall execute and return the environmental study agreement within 30 Calendar Days of receipt or its Interconnection Request shall be deemed withdrawn and the unexpended amount of its deposit, if any, shall be returned.

### **3.5 OASIS Posting**

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

**3.5.2 Requirement to Post Interconnection Study Metrics**  
Transmission Provider will maintain on its OASIS or its website summary statistics related to processing Interconnection Studies pursuant to Interconnection Requests, updated quarterly. If Transmission Provider posts this information on its website, a link to the information must be provided on Transmission Provider's OASIS site. For each calendar quarter, Transmission Providers must calculate and post the information detailed in sections 3.5.2.1 through 3.5.2.4.

**3.5.2.1 Phase One Cluster Study Processing Time**

- (A) Number of Interconnection Requests that had Phase One Cluster Studies completed within Transmission Provider's coordinated region during the reporting quarter,
- (B) Number of Interconnection Requests that had Phase One Cluster Studies completed within Transmission Provider's coordinated region during the reporting quarter that were completed more than one hundred twenty (120) Calendar Days after the close of the Customer Engagement Window,
- (C) At the end of the reporting quarter, the number of active valid Interconnection Requests with ongoing incomplete Phase One Cluster Studies where such Interconnection Request had executed a Phase One Cluster Study Agreement more than one hundred twenty (120) Calendar Days before the reporting quarter end,
- (D) Mean time (in days), Phase One Cluster Studies completed within Transmission Provider's coordinated region during the reporting quarter, from the close of the Customer Engagement Window to the date when Transmission Provider provided the completed Phase One Cluster Study Report to Interconnection Customer,
- (E) Percentage of Phase One Cluster Studies exceeding one hundred twenty (120) Calendar Days to complete this reporting quarter, calculated as the sum of 3.5.2.1(B) plus 3.5.2.1(C) divided by the sum of 3.5.2.1(A) plus 3.5.2.1(C)).

**3.5.2.2 Phase Two Cluster Study Processing Time**

- (A) Number of Interconnection Requests that had Phase Two Cluster Studies completed within Transmission Provider's coordinated region during the reporting quarter,
- (B) Number of Interconnection Requests that had Phase Two Cluster Studies completed within Transmission Provider's coordinated region during the reporting quarter that were completed more than one hundred eighty (180) Calendar Days after Transmission Provider notifies Interconnection Customers in the Cluster of the commencement of the Phase Two Cluster Study,
- (C) At the end of the reporting quarter, the number of active valid Interconnection Requests with ongoing incomplete Phase Two Cluster Studies one hundred eighty (180) Calendar Days after Transmission Provider notifies

Interconnection Customer in the Cluster of the commencement of the Phase Two Cluster Study,

- (D) Mean time (in days), Phase Two Cluster Studies completed within Transmission Provider's coordinated region during the reporting quarter, from the commencement of the Phase Two Cluster Study to the date when Transmission Provider provided the completed Phase Two Cluster Study Report to Interconnection Customer,
- (E) Percentage of Phase Two Cluster Studies exceeding one hundred eighty (180) Calendar Days to complete this reporting quarter, calculated as the sum of 3.5.2.2(B) plus 3.5.2.2(C) divided by the sum of 3.5.2.2(A) plus 3.5.2.2(C)).

### **3.5.2.3 Interconnection Facilities Studies Processing Time**

- (A) Number of Interconnection Requests that had Interconnection Facilities Studies that were completed within Transmission Provider's coordinated region during the reporting quarter,
- (B) Number of Interconnection Requests that had Interconnection Facilities Studies that were completed within Transmission Provider's coordinated region during the reporting quarter that were completed later than the completion schedule in Interconnection Customer's executed Interconnection Facilities Study Agreement,
- (C) At the end of the reporting quarter, the number of active valid Interconnection Service requests with ongoing incomplete Interconnection Facilities Studies where such Interconnection Requests had executed Interconnection Facilities Studies Agreement received by Transmission Provider before the reporting quarter end,
- (D) Mean time (in days), for Interconnection Facilities Studies completed within Transmission Provider's coordinated region during the reporting quarter, calculated from the date when Transmission Provider received the executed Interconnection Facilities Study Agreement to the date when Transmission Provider provided the completed Interconnection Facilities Study to Interconnection Customer,
- (E) Percentage of delayed Interconnection Facilities Studies this reporting quarter, calculated as the sum of 3.5.2.3(B) plus 3.5.2.3(C) divided by the sum of 3.5.2.3(A) plus 3.5.2.3(C)).

#### **3.5.2.4 Interconnection Requests Withdrawn from Interconnection Queue**

- (A) Number of Interconnection Requests withdrawn from Transmission Provider's interconnection queue during the reporting quarter,
- (B) Number of Interconnection Requests withdrawn from Transmission Provider's interconnection queue during the reporting quarter before completion of any interconnection studies or execution of any interconnection study agreements,
- (C) Number of Interconnection Requests withdrawn from Transmission Provider's interconnection queue during the reporting quarter before completion of the Phase Two Cluster Study,
- (D) Number of Interconnection Requests withdrawn from Transmission Provider's interconnection queue during the reporting quarter before completion of an Interconnection Facility Study,
- (E) Number of Interconnection Requests withdrawn from Transmission Provider's interconnection queue after execution of a generator interconnection agreement,
- (F) Mean time (in days), for all withdrawn Interconnection Requests, from the date when the request was determined to be valid to when Transmission Provider received the request to withdraw from the queue.

**3.5.3** Transmission Provider is required to post on OASIS or its website the measures in paragraph 3.5.2.1(A) through paragraph 3.5.2.4(F) for each calendar quarter within 30 days of the end of the calendar quarter. Transmission Provider will keep the quarterly measures posted on OASIS or its website for three calendar years with the first required reporting year to be in the first quarter of the year when Transmission Provider completes its first Cluster Study. If Transmission Provider retains this information on its website, a link to the information must be provided on Transmission Provider's OASIS site.

**3.5.4** In the event that any of the values calculated in paragraphs 3.5.2.1(E), 3.5.2.2(E) or 3.5.2.3(E) exceeds 25 percent for two consecutive calendar quarters, Transmission Provider will have to comply with the measures below for the next four consecutive calendar quarters and must continue reporting this information until Transmission Provider reports four consecutive calendar quarters



without the values calculated in 3.5.2.1(E), 3.5.2.2 (E) or 3.5.2.3(E) exceeding 25 percent for two consecutive calendar quarters:

- (i) Transmission Provider shall post on OASIS or its website a report describing the reason for each study or group of clustered studies pursuant to an Interconnection Request that exceeded its deadline for completion (excluding any allowance for Reasonable Efforts). Transmission Provider must describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The report must be posted within 45 days of the end of the calendar quarter.
- (ii) Transmission Provider may aggregate the total number of employee-hours and third party consultant hours expended towards interconnection studies within its coordinated region that quarter and post on OASIS or its website. If Transmission Provider posts this information on its website, a link to the information must be provided on Transmission Provider's OASIS site. This information is to be posted within 30 days of the end of the calendar quarter.

### **3.6 Coordination with Affected Systems**

Transmission Provider will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators and, if possible, include those results (if available) in its applicable Interconnection Study within the time frame specified in this LGIP. Transmission Provider will include such Affected System Operators in all meetings held with Interconnection Customer as required by this LGIP. Interconnection Customer will cooperate with Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems. A transmission provider which may be an Affected System shall cooperate with Transmission Provider with whom interconnection has been requested in all matters related to the conduct of studies and the determination of modifications to Affected Systems. It is the responsibility of the Affected System Operator to provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to (i) complete any interconnection studies and (ii) construct any necessary facilities on the Affected System needed to reliably interconnect at the requested service level.

### **3.7 Withdrawal**

Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to Transmission Provider. In addition, if Interconnection Customer fails to adhere to all requirements of this LGIP, except as provided in Section 13.5 (Disputes), Transmission Provider shall deem the Interconnection Request to be withdrawn and shall provide written notice to Interconnection Customer of the deemed withdrawal and an

explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice from Transmission Provider, Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cures the deficiency or to notify Transmission Provider of its intent to pursue Dispute Resolution.

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

If Interconnection Customer withdraws its Interconnection Request or is deemed withdrawn by Transmission Provider under Section 3.7 of this LGIP, Transmission Provider shall

- (i) Update OASIS as appropriate;
- (ii) Impose the Withdrawal Charge described in Section 3.7.1 of this LGIP; and
- (iii) Issue any refund to Interconnection Customer, if applicable as specified in Section 13.3.

In the event of such withdrawal, Transmission Provider, subject to the confidentiality provisions of Section 13.1, shall provide, at Interconnection Customer's request, all information that Transmission Provider developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

### **3.7.1 Withdrawal Charge**

If Interconnection Customer withdraws its Interconnection Request or is deemed withdrawn under Section 3.7 of this LGIP, or the Generating Facility does not otherwise reach Commercial Operation, Interconnection Customer shall be subject to a Withdrawal Charge as set forth in Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

### 3.8 Identification of Contingent Facilities

#### 3.8.1 In General

Transmission Provider's method for identifying the Contingent Facilities to be provided to Interconnection Customer at the conclusion of the Phase Two Cluster Study and included in Interconnection Customer's LGIA is set forth below. The method permits the parties to determine why a specific Contingent Facility was identified and how it relates to the Interconnection Request.

#### 3.8.2 Baseline Assumptions

Transmission Provider uses a technical screening process to identify Contingent Facilities, which includes starting with the baseline assumption that the following are in service: (i) Generating Facilities that are directly interconnected to the Transmission System; (ii) Generating Facilities that are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) Generating Facilities that have a pending higher queued Interconnection Request to interconnect to the Transmission System and their associated Interconnection Facilities and Network Upgrade requirements; (iv) Generating Facilities that have no Queue Position, but have executed an interconnection agreement; (v) Facilities or upgrade requirements to the extent they have an impact on the Generating Facilities ability to operate; and (vi) Transmission Provider's transmission expansion plan components, or the transmission expansion plan components of third-party transmission providers, to the extent they have an impact on the Interconnection Request.

#### 3.8.3 Technical Screening Process

The technical screening process for identifying Contingent Facilities is comprised of the following steps:

- (i) **Step 1, Identify Potential Contingent Facilities.** Transmission Provider will review all applicable Interconnection Study results for higher queued Interconnection Requests to identify any unbuilt Interconnection Facilities and/or Network Upgrades as potential Contingent Facilities to be evaluated pursuant to Steps 2-5 below.
- (ii) **Step 2, Remove a Potential Contingent Facility and Perform Applicable Contingency Analyses.** Transmission Provider will take a potential Contingent Facility out of service in its study model and: (a) perform steady state, short circuit, voltage stability, and/or transient stability analyses to determine if the Transmission System demonstrates acceptable pre- and post-contingency system performance, in

accordance with current Transmission Provider, WECC, NERC, or Reliability Coordinator criteria or standards; and (b) document the resulting Transmission System performance deficiencies following the analysis in Step 2(a).

- (iii) **Step 3, Add the Proposed Generating Facility into Model and Rerun Contingency Analyses.** Transmission Provider will add the proposed Generating Facility into the model after taking the potential Contingent Facility out of service as provided in Step 2 above, and: (a) perform the same analysis for the added proposed Generating Facility as the analysis outlined in Step 2(a) for the removed potential Contingent Facility; and (b) document the resulting Transmission System performance deficiencies following the analysis in Step 3(a).
- (iv) **Step 4, Apply Threshold and Categorize.** If the Transmission System performance deficiencies observed in Step 3(b) are: (a) exacerbated by one percent (1%) or greater than the Transmission System performance deficiencies initially observed in Step 2(b), then the potential Contingent Facility that is individually evaluated in Step 2 will be deemed a Contingent Facility; or (b) exacerbated by less than one percent (1%) than the Transmission System performance deficiencies initially observed in Step 2(b) so long as the impact allows all equipment to remain below equipment rating, then the potential Contingent Facility that is individually evaluated in Step 2 will not be deemed a Contingent Facility.
- (v) **Step 5, Repeat for Each Identified Potential Contingent Facility.** Transmission Provider will repeat Steps 2-4 for each potential Contingent Facility identified in Step 1.
- (vi) **Per Se Contingent Facilities.** Notwithstanding Steps 1-5, an Interconnection Facility or Network Upgrade of a higher-queued Interconnection Request shall automatically be deemed a Contingent Facility if such Interconnection Facility or Network Upgrade would be necessary for the proper functioning of the proposed Generating Facility (as defined in the LGIA).

**3.8.4** The Phase Two Cluster Study Report will list Contingent Facilities in an appendix, which will include: (a) a description of each Contingent Facility; and (b) the Interconnection Request, transmission service request or planned project for which the Contingent Facility was initially required. This list of Contingent Facilities is subject to

updates if a Phase Two Cluster Study is re-studied pursuant to Section 7.

- 3.8.5** If requested by Interconnection Customer, and if readily available and not commercially sensitive, Transmission Provider will also provide an estimate of the costs of and the in-service date for each Contingent Facility, which may be subject to later updates if a Contingent Facility's estimated costs and in-service dates change.

## **Section 4. Interconnection Request Evaluation**

Once an Interconnection Customer has submitted a valid Interconnection Request pursuant to Section 3.4, such Interconnection Request shall be admitted to Transmission Provider's queue for further processing pursuant to the following procedures.

### **4.1 Queue Position**

#### **4.1.1 Assignment of Queue Position**

Transmission Provider shall assign a Queue Position as follows: the Queue Position within the queue shall be assigned based upon the date and time of receipt of all items required pursuant to the provisions of Section 3.4. Except as provided in Section 4.2.4, for the purpose of a Cluster Study, all requests submitted within the same Cluster Request Window and to be studied in a single Cluster shall be assigned the same Queue Position and the Queue Position of individual Interconnection Requests shall have no bearing on the allocation of system upgrade costs within their Cluster.

#### **4.1.2 Senior Queue Position**

A senior Queue Position assigned to an Interconnection Request is one that has been placed "earlier" in the queue in relation to another Interconnection Request that is assigned a lower (junior) Queue Position. Interconnection requests assigned to Clusters initiated earlier in time shall be considered to have a senior (higher) Queue Position than Interconnection Requests assigned to Clusters initiated later.

### **4.2 General Study Process**

- 4.2.1 Cluster Study Announcement.** The initial Cluster Request Window and Cluster Study for the transition process is set forth in Attachment R.

Transmission Provider shall announce the date for the commencement of the Cluster Study and the opening of the Cluster Request Window in a notice posted on OASIS.

Transmission Provider will provide Interconnection Customers with no less than one hundred eighty (180) Calendar Days of advance notice of the start date of each Cluster Study and opening of the Cluster Request Window.

Transmission Provider will only accept Interconnection Requests when the Cluster Request Window is open as follows: Starting from ninety (90) Calendar Days after Transmission Provider closes the preceding Cluster Request Window and ending ninety (90) Calendar Days before the start of the next Phase One Cluster Study.

- 4.2.2 Study Cost Allocation.** Transmission Provider shall determine each Interconnection Customer's share of the cost of a Cluster Study by allocating: (1) fifty percent (50%) of the applicable study costs to Interconnection Customers on a per capita basis based on the number of Interconnection Requests included in the applicable Cluster; and (2) fifty percent (50%) of the applicable study costs to Interconnection Customers on a pro-rata basis based on the total megawatts of Generating Facility Capacity requested to be studied in the applicable Cluster.

Any refunds of deposits paid in excess of Interconnection Customer costs allocated pursuant to this Section 4.2.2 shall be issued in accordance with Section 13.3.

- 4.2.3 Transmission Provider's Interconnection Facilities and Network Upgrade Cost Allocation.** Unless Transmission Provider or Transmission Owner elects to fund the capital for the Network Upgrades, they shall be solely funded by Interconnection Customer. Interconnection Customer funding of Network Upgrades is eligible for credits as provided in Article 11.4 of the LGIA. Notwithstanding Section 3.1, with regard to Transmission Provider's Interconnection Facilities and Network Upgrades identified in Cluster Studies, Transmission Provider shall calculate each Interconnection Customer's share of the costs of such Interconnection Facilities and Network Upgrades in the manner set forth below. If a Cluster Study includes one or more Cluster Areas or Scalable Plan Blocks within a Cluster Area, such costs shall be calculated and allocated among Interconnection Customers within the same Cluster Area or Scalable Plan Block.

- a) Station equipment Network Upgrades, including all switching stations, shall be allocated based on the number of Generating Facilities interconnecting at an individual station on a per capita basis (i.e. on a per Interconnection Request basis). If multiple Interconnection Customers are connecting to Transmission Provider's System through a single Interconnection Customer's

Interconnection Facility (i.e. sharing Interconnection Customer's Interconnection Facility connecting to Transmission Provider's Interconnection Facility(ies), those Interconnection Customers shall be considered one Interconnection Customer for the per capita calculation described in the preceding sentence. Shared Transmission Provider's Interconnection Facilities shall be allocated based on the number of Generating Facilities sharing that Transmission Provider's Interconnection Facility on a per capita basis.

- b) The allocation of costs for Network Upgrades other than those identified in Section 4.2.3(a) shall be as follows: Interconnection Customers within a Cluster that have requested Energy Resource Interconnection Service shall bear their allocable share of the cost of Network Upgrades necessary to provide such service. Interconnection Customers within a Cluster Study that have requested Network Resource Interconnection Service shall bear their allocable share of the cost of Network Upgrades necessary to provide such service. Such allocation shall be based on the proportional capacity of each individual Generating Facility in the Cluster requiring such Network Upgrades in accordance with the process provided in Sections 6.4 and 7.3.
- c) Costs of Transmission Provider's Interconnection Facilities are directly assigned to Interconnection Customer(s) using such facilities.

**4.2.4 Scalable Plan Blocks Within Cluster Areas.** Notwithstanding Section 4.1.1, Transmission Provider may: (1) identify plans of service for a subset of Interconnection Requests within a Cluster Area ("Scalable Plan Blocks"); (2) where possible, specify a schedule and Network Upgrades for each Scalable Plan Block that would proceed within a Cluster Area; and (3) allocate the costs of the Network Upgrades for each Interconnection Request within a Scalable Plan Block following the methodology in Section 4.2.3. Transmission Provider will use the Queue Position for an Interconnection Customer's Interconnection Request to determine priority placement within a Scalable Plan Block, so long as Interconnection Customer's readiness demonstrations are met.

**4.2.5** Transmission Provider shall use Reasonable Efforts to conduct its cluster study on a three-year cycle. Transmission Provider may in its sole discretion conduct a cluster study sooner than a three-year cycle.

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

An Interconnection Customer may transfer its Queue Position to another entity only if such entity acquires the specific Generating Facility identified

in the Interconnection Request and the Point of Interconnection does not change.

#### **4.4 Modifications**

Interconnection Customer shall submit to Transmission Provider, in writing, modifications to any information provided in the Interconnection Request.

Interconnection Customer shall retain its Queue Position if the modifications are in accordance with Sections 4.4.1, 4.4.2 or 4.4.5, or are determined not to be Material Modifications pursuant to Section 4.4.3.

Notwithstanding the above, during the course of the Interconnection Studies, either Interconnection Customer or Transmission Provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to Transmission Provider and Interconnection Customer, such acceptance not to be unreasonably withheld, Transmission Provider shall modify the Point of Interconnection and/or configuration in accordance with such changes and proceed with any re-studies necessary to do so in accordance with Section 6.7(e), Section 7.6(f), and Section 8.5 as applicable, and Interconnection Customer shall retain its Queue Position.

**4.4.1** During the first Phase One Cluster Study Customer Review Period, as specified in Section 6.6, modifications permitted under this Section shall include specifically: (a) a decrease of up to 60 percent of electrical output (MW) of the proposed project, through either (1) a decrease in plant size or (2) a decrease in Interconnection Service level (consistent with the process described in Section 3.1) accomplished by applying Transmission Provider-approved injection-limiting equipment; (b) modifying the technical parameters associated with the Large Generating Facility technology or the Large Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration. For increases in Interconnection Service level, Interconnection Customer must submit a new Interconnection Request for the incremental increase to be included in a subsequent Cluster Study for the purposes of cost allocation and study analysis.

**4.4.2** During the first Phase Two Cluster Study Review Period, as specified in Section 7.5, the modifications permitted under this Section shall include specifically: (a) additional 15 percent decrease of electrical output of the proposed project through either (1) a decrease in plant size (MW) or (2) a decrease in Interconnection Service level (consistent with the process described in Section 3.1)



accomplished by applying Transmission Provider-approved injection-limiting equipment; (b) Large Generating Facility technical parameters associated with modifications to Large Generating Facility technology and transformer impedances; provided, however, the incremental costs associated with those modifications are the responsibility of the requesting Interconnection Customer; and (c) a Permissible Technological Advancement for the Large Generating Facility after the submission of the Interconnection Request. Section 4.4.6 specifies a separate technological change procedure including the requisite information and process that will be followed to assess whether Interconnection Customer's proposed technological advancement under Section 4.4.2(c) is a Material Modification. Section 1 contains a definition of Permissible Technological Advancement.

- 4.4.3** Prior to making any modification other than those specifically permitted by Sections 4.4.1, 4.4.2, and 4.4.5, Interconnection Customer may first request that Transmission Provider evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, Transmission Provider shall evaluate the proposed modifications prior to making them and inform Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Notwithstanding Section 4.4.4, Interconnection Customer may request, and Transmission Provider shall evaluate within sixty (60) Calendar Days, the addition of a Co-Located Resource if the addition of the Co-Located Resource does not increase the requested Interconnection Service level. Any change to the Point of Interconnection, except those deemed acceptable under Sections 3.1, 4.4.1, or so allowed elsewhere, shall constitute a Material Modification. Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.
- 4.4.4** Upon receipt of Interconnection Customer's request for modification permitted under this Section 4.4, Transmission Provider shall commence and perform any necessary additional studies as soon as practicable, but in no event shall Transmission Provider commence such studies later than thirty (30) Calendar Days after receiving notice of Interconnection Customer's request. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost. Any such modification of the Interconnection Request must be accompanied by any resulting updates to the models described in Attachment A to Appendix 1 of this LGIP.
- 4.4.5** Extensions of less than three (3) cumulative years in the Commercial Operation Date of the Large Generating Facility to which the Interconnection Request relates are not material and should be

handled through construction sequencing.

#### **4.4.6 Technological Change Procedure**

At any time prior to the return of the executed Interconnection Facility Study Agreement to Transmission Provider, Interconnection Customer may request a modification under this Section 4.4.6, for incorporation of a technological advancement into its Generating Facility. To complete that request, Interconnection Customer shall submit the following to Transmission Provider:

- 1) A written technological advancement request, specifying the change in technology Interconnection Customer seeks to incorporate into its Interconnection Request;
- 2) A \$10,000 deposit;
- 3) An updated version of the Interconnection Request for a Large Generating Facility, found in Appendix 1 of this LGIP, that reflects the data associated with the change in technology that Interconnection Customer seeks to incorporate;
- 4) Any analysis Interconnection Customer has that demonstrates how incorporation of the proposed technological advancement would (i) result in electrical performance that is equal to or better than the electrical performance expected prior to the technological change, and (ii) not cause any reliability concerns; and,
- 5) To the extent applicable, updated modeling data in PowerWorld or GE PSLF format, or in such other format as Transmission Provider may agree to accept.

Once the technological advancement request, deposit, and additional data are received by Transmission Provider, Transmission Provider will evaluate whether the technological advancement is a Material Modification or whether further study is necessary to complete the analysis of whether the technological advancement is a Material Modification. If Transmission Provider determines that the proposed technological advancement is permissible, then no study will be necessary, the proposed advancement will not be considered a Material Modification, and Interconnection Customer's deposit will be refunded.

Should further studies be required, Transmission Provider's studies may include steady-state, reactive power, short

circuit/fault duty, stability analyses, and any other appropriate studies that Transmission Provider deems necessary to determine whether the technological advancement results in electrical performance that is equal to or better than the electrical performance expected prior to the technology change, and whether such technological advancement causes any reliability concerns. In addition, Transmission Provider's studies may include any additional environmental studies that Transmission Provider deems necessary to comply with NEPA and other environmental laws. Transmission Provider shall use Reasonable Efforts to complete the assessment within thirty (30) Calendar Days after Transmission Provider receives a completed request for incorporation of the technological advancement that includes the deposit and the data outlined above. At the conclusion of the study, Transmission Provider is to provide an accounting of its costs to Interconnection Customer and either refund any overage or invoice Interconnection Customer for any shortage of costs that exceed the deposit amount.

If Transmission Provider's assessment determines that the change is a Permissible Technological Advancement, Transmission Provider shall notify Interconnection Customer and the Permissible Technological Advancement shall be incorporated without the loss of Interconnection Customer's queue position. If, however, Transmission Provider cannot accommodate the proposed technological advancement without triggering the Material Modification provision of this LGIP, Transmission Provider is to tender a report with the results of the steady-state analyses, reactive power capabilities, short circuit/fault duty impacts, stability analyses, and any other studies that were completed, including an explanation of why the technological advancement is deemed a Material Modification. Once notified, Interconnection Customer may choose whether to abandon the proposed modification or proceed and lose its queue position.

## **Section 5. New Transmission Provider**

### **5.1 [Reserved]**

### **5.2 New Transmission Provider**

If Transmission Provider transfers control of its Transmission System to a successor Transmission Provider during the period when an Interconnection Request is pending, the original Transmission Provider shall transfer to the successor Transmission Provider any amount of the deposit or payment with

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

## **Section 6. Phase One Cluster Study**

### **6.1 Phase One Cluster Study Agreement**

No later than five (5) Business Days after the Scoping Meeting, Transmission Provider shall use Reasonable Efforts to tender to each Interconnection Customer that submitted a valid Interconnection Request a Phase One Cluster Study Agreement in the form of Appendix 2 to this LGIP. The Phase One Cluster Study Agreement shall require each Interconnection Customer to compensate Transmission Provider for its share of the actual cost of the Study. The specifications, assumptions, or other provisions in the appendices of the Phase One Cluster Study Agreement provided pursuant to this Section 6.1 shall be subject to change by Transmission Provider following conclusion of the Scoping Meeting. Transmission Provider will not provide a Point of Interconnection in the Phase One Cluster Study Agreement, unless Interconnection Customer provided a Point of Interconnection in the application.

#### **6.1.1 Phase One Cluster Study Deposit**

Interconnection Customer shall submit to Transmission Provider a deposit of:

- a) \$25,000 plus \$500 per MW of Generating Facility Capacity of the Generating Facility, up to a maximum of \$100,000.

Transmission Provider shall apply each Interconnection Customer's Phase One Cluster Study deposit toward such Interconnection Customer's share of the costs of the Phase One Cluster Study and any Cluster Re-Study (as allocated pursuant to Section 4.2.2).

### **6.2 Customer Engagement Window**

**6.2.1** Thirty-five (35) Business Days after the close of the Cluster Request Window, Transmission Provider shall use Reasonable Efforts to open a forty-five (45) Calendar Day period ("Customer Engagement Window"). Upon written consent of all Interconnection Customers

within a specific Cluster, Transmission Provider may shorten the Customer Engagement Window in order to start the Cluster Study earlier. Within the first five (5) Business Days of the Customer Engagement Window, Transmission Provider shall post on its OASIS site a list of Interconnection Requests for each Cluster. The list shall identify, for each Interconnection Request: (i) the requested amount of Interconnection Service; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection is requested; (iv) the requested In-Service Date; (v) the type of Interconnection Service requested; and (vi) the type of Generating Facility to be constructed including fuel type. Transmission Provider shall use Reasonable Efforts to hold a Scoping Meeting for all interested Interconnection Customers within the first ten (10) Business Days of the start of the Customer Engagement Window. During the Customer Engagement Window, Transmission Provider will use Reasonable Efforts to provide to each Interconnection Customer a non-binding good faith estimate of such Interconnection Customer's share of the cost and the timeframe for completing the Phase One Cluster Study.

#### **6.2.2 [Reserved]**

### **6.3 Execution of Phase One Cluster Study Agreement**

Within fifteen (15) Business Days of Transmission Provider tendering the Phase One Cluster Study Agreement, Interconnection Customer shall execute and deliver the agreement to Transmission Provider, along with the Phase One Cluster Study deposit specified in Section 6.1.1. At the end of the Customer Engagement Window, all Interconnection Requests deemed valid and for which there is an executed Phase One Cluster Study Agreement in the form of Appendix 2 and Phase One Cluster Study deposit as specified in Section 6.1.1 shall be included in the Cluster. Following the Customer Engagement Window, Transmission Provider shall initiate the Phase One Cluster Study described in Sections 6.4 and 6.5.

### **6.4 Scope of Phase One Cluster Study**

The Phase One Cluster Study shall evaluate the impact of all proposed Interconnection Requests in the applicable Cluster on the reliability of the Transmission System. The Phase One Cluster Study will consider the Base Cases as well as all Generating Facilities (and with respect to (iii) and (iv) below, any identified Network Upgrades associated with such senior queued interconnection) that, on the date the Cluster Request Window closes:

- (i) are existing and directly interconnected to the Transmission System;
- (ii) are existing and interconnected to Affected Systems and may have an impact on the Interconnection Request;

- (iii) have a pending senior queued Interconnection Request or are in a senior queued Cluster to interconnect to the Transmission System; and
- (iv) have executed an LGIA.

For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Phase One Cluster Study shall consider the Interconnection Service level requested by each Interconnection Customer in the Cluster, unless one or more Interconnection Customers' full Generating Facility Capacity is required to be studied due to safety or reliability concerns.

The Phase One Cluster Study shall consist of a short circuit analysis, a power flow analysis, and a preliminary analysis of the necessary Interconnection Facilities and Network Upgrades, the results of which will be documented in a Phase One Cluster Study Report, or associated Cluster Re-Study Report, as applicable for each Cluster Area.

Transmission Provider will determine the Point of Interconnection at its sole discretion to improve: the reliability benefits, cost and/or benefits of the interconnection for the Cluster Area. In the event that Transmission Provider determines that a requested Point of Interconnection is not feasible or may need to be relocated, Transmission Provider will make Reasonable Efforts to consult with the impacted Interconnection Customer, so long as these meetings will not delay the issuance of the Phase One Cluster Study Report.

For purposes of identifying Network Upgrades and other facilities caused by requests for Network Resource Interconnection Service, Transmission Provider shall assume all Interconnection Requests in the applicable Phase One Cluster Study have requested Energy Resource Interconnection Service, to establish a baseline of shared Network Upgrades. Transmission Provider will include the assessment for Network Resource Interconnection Service as part of the Phase Two Cluster Study. Interconnection Customers requesting Network Resource Interconnection Service shall continue to be responsible for Interconnection Customer's allocated cost for the Phase One Cluster Study, as specified in Section 4.2.2 of this LGIP.

The Phase One Cluster Study Report will state (i) the Point of Interconnection; (ii) the assumptions upon which the Phase One Cluster Study Report is based; (iii) the results of the analyses; and (iv) the requirements or potential impediments to providing the Interconnection Service requested by any Interconnection Customer in the Cluster, including a non-binding good faith estimate of cost and non-binding good faith estimated time to construct. The Phase One Cluster Study Report shall identify Interconnection Facilities and Network Upgrades expected to be required to reliably interconnect the Generating Facilities in each Cluster Area of the Cluster Study at the requested Interconnection Service level and shall provide non-binding cost estimates for any required Interconnection Facilities and Network Upgrades. The Phase One

Cluster Study Report will provide study results based on Cluster Areas or Scalable Plan Blocks, if applicable, and not on an individualized basis.

#### **6.5 Phase One Cluster Study Procedures**

Transmission Provider shall initiate the Cluster Study process pursuant to Section 4.2, and shall utilize existing studies to the extent practicable when it performs the Phase One Cluster Study.

- a) Transmission Provider may segment and perform Cluster Studies according to geographically and/or electrically relevant areas on Transmission Provider's Transmission System ("Cluster Area"). Cluster Areas shall be determined by Transmission Provider during the Phase One Cluster Study and shall be based on the valid Interconnection Requests that are submitted during the Cluster Request Window for which there is an executed Phase One Cluster Study Agreement.
- b) Unless Cluster Re-Studies are required pursuant to Section 6.7, Transmission Provider shall use Reasonable Efforts to complete the Phase One Cluster Study within one-hundred twenty (120) Calendar Days of the close of the Customer Engagement Window.
- c) At the request of Interconnection Customer or at any time Transmission Provider determines that it will not meet the required timeframe for completing a Cluster Study, Transmission Provider shall notify Interconnection Customers as to the schedule status of the Phase One Cluster Study. If Transmission Provider is unable to complete a Phase One Cluster Study within the specified time period, it shall notify Interconnection Customers in the Cluster and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, Transmission Provider shall provide to an Interconnection Customer in the Cluster all supporting documentation, work papers, and relevant power flow and short circuit databases for the Phase One Cluster Study, subject to confidentiality arrangements consistent with Section 13.1.

#### **6.6 Customer Review Period and Commercial Readiness Options**

After Transmission Provider posts the Phase One Cluster Study Report(s) or Cluster Re-Study Report(s) to its OASIS, Transmission Provider shall commence a ninety (90) Calendar Day customer review period ("Customer Review Period"). Transmission Provider may shorten the Customer Review Period upon the written consent of all Interconnection Customers within a specific Cluster, or if a Cluster Re-Study is determined to be necessary in accordance with Section 6.7. During the Customer Review Period, Transmission Provider shall:

- (a) Issue a Phase One Cluster Study Report (or, as applicable, Cluster Re-Study Report) to each Interconnection Customer and post such report on its OASIS.

- (b) Within ten (10) Business Days of simultaneously posting a Phase One Cluster Study Report (or, as applicable, Cluster Re-Study Report) on OASIS and furnishing such report to Interconnection Customers in the applicable Cluster, Transmission Provider shall convene an open meeting to discuss the study results (“Cluster Study Report Meeting” or “Cluster Re-Study Meeting”).

**6.6.1** An Interconnection Customer in the applicable Cluster wishing to proceed to a Phase Two Cluster Study must submit one of the following Commercial Readiness Milestone Options totaling the requested Interconnection Service amount, where applicable, to Transmission Provider no later than the completion of the Customer Review Period following the Phase One Cluster Study:

- a) Executed term sheet (or comparable evidence) related to a contract for sale, where the term of the sale is not less than five (5) years, for (i) the constructed Generating Facility, (ii) the Generating Facility’s energy or capacity, or (iii) the Generating Facility’s Ancillary Services;
- b) Documentation from a Load-Serving Entity, commercial, industrial, large end-use customer, competitive retail supplier, power marketer, or other wholesale buyer of active negotiations (or the equivalent, e.g. for an ongoing relationship) for purchase of the output of the Large Generating Facility. During the Phase Two Customer Review Period, Interconnection Customer shall provide documentation that they continue to meet commercial readiness by providing evidence of another Commercial Readiness Milestone (e.g., executed term sheet under Section 6.6.1(a) of this LGIP);
- c) Executed contract binding upon the parties for sale to a Load-Serving Entity, competitive retail supplier, power marketer, other wholesale buyer, or a commercial, industrial, or large end-use customer for: (i) the constructed Generating Facility, (ii) the Generating Facility’s energy or capacity where the term of sale is not less than five (5) years, or (iii) the Generating Facility’s Ancillary Services if the Generating Facility is an electric storage resource where the term of sale is not less than five (5) years;
- d) Reasonable evidence that the Generating Facility has been selected by or for a Load-Serving Entity in a Resource Plan or is on the final shortlist for a Resource Solicitation Process by or for a Load-Serving Entity, if such a plan or final short list has been approved or acknowledged by the applicable authority (including for an Investor-Owned Utility its state utility commission, as applicable);



- e) Site specific purchase order for Generating and/or Interconnection Facilities equipment specific to the Queue Position;
- f) Documentation from Interconnection Customer of reasonable evidence of transmission service reservation (or comparable evidence) for the Generating Facility. Transmission Provider in its sole discretion may evaluate individual facts and circumstances of reasonable evidence of transmission service that originates from the Point of Interconnection, such as: a confirmed Long-Term firm transmission service reservation, confirmed Long-Term conditional firm transmission service reservation with roll over rights, designation of a Network Resource (DNR), a long-term confirmed redirect, or a Long-Term firm transmission service offer that will be confirmed following a transmission expansion project that has been securitized; or,
- g) In lieu of submitting evidence of a Commercial Readiness Milestone as specified above in Sections 6.6.1(a)-(f), Interconnection Customer shall provide a Commercial Readiness Deposit equal to two times the Interconnection Requests Phase Two Cluster Study deposit up to a maximum of \$500,000, made in the form of a cash deposit, irrevocable letter of credit, or deposit into an escrow account that is established by Interconnection Customer. Transmission Provider will refund the Commercial Readiness Deposit to Interconnection Customer according to Sections 13.3.2 and 13.3.3 of this LGIP.
- h) If Interconnection Customer's Commercial Readiness Milestone demonstration as specified in Sections 6.6.1(a)-(f) does not meet the total requested Interconnection Service amount where applicable, Interconnection Customer shall supplement their Commercial Readiness Milestone with a Commercial Readiness Deposit in Section 6.6.1(g) that is reduced by a percentage based on the amount already demonstrated.

**6.6.2** An Interconnection Customer in the applicable Cluster wishing to proceed to a Phase Two Cluster Study must submit validated detailed models, in a format acceptable to Transmission Provider, representing the Generating Facility to Transmission Provider no later than the completion of the first Customer Review Period following the initial Phase One Cluster Study.

**6.6.3** An Interconnection Customer in the applicable Cluster wishing to proceed to a Phase Two Cluster Study shall re-demonstrate Site Control that was provided in Section 3.4.1 (iii)-(iv).

- 6.6.4** After the close of the Customer Review Period, Transmission Provider shall use Reasonable Efforts to confirm each Large Generation Interconnection Customer in the applicable Cluster has submitted documentation that it has met one of the Commercial Readiness Milestone Options in Section 6.6.1, the validated detailed models in Section 6.6.2, and re-demonstration of Site Control in Section 6.6.3.

**6.7 Phase One Cluster Study Withdrawals and Re-Studies**

- a) If no Interconnection Customer in the applicable Cluster withdraws from the Cluster after completion of the Phase One Cluster Study or a Cluster Re-Study, or is deemed withdrawn pursuant to Section 3.7, Transmission Provider shall electronically notify Interconnection Customers in the Cluster within twenty-five (25) Business Days of the close of the Customer Review Period that a Cluster Re-Study is not required.
- b) If one or more Interconnection Customer withdraw(s) from the Cluster, Transmission Provider shall have thirty (30) Business Days following the Customer Review Period to determine if a Cluster Re-Study is necessary. If Transmission Provider determines a Cluster Re-Study is not necessary, Transmission Provider shall provide an updated Phase One Cluster Study Report within thirty (30) Calendar Days of such determination. When the updated Cluster Study Report is issued, Transmission Provider shall electronically notify Interconnection Customers in the Cluster that a Cluster Re-Study is not required.
- c) If Transmission Provider determines a Cluster Re-Study is necessary, Transmission Provider will continue with such Cluster Re-Studies as described in Section 6.7(d) below, until Transmission Provider determines that no further Cluster Re-Studies are required.
- d) The scope of any Cluster Re-Study shall be consistent with the scope of the initial Phase One Cluster Study pursuant to Section 6.4. Transmission Provider shall use Reasonable Efforts to complete the Cluster Re-Study for all Cluster Areas within one hundred twenty (120) Calendar Days upon notification of the need for a Cluster Re-Study. Transmission Provider shall commence a Customer Review Period for the Cluster Re-Study and hold an open meeting (“Cluster Re-Study Meeting”) within ten (10) Business Days of posting the Cluster Re-Study Reports on OASIS.

If additional Cluster Re-Studies are required, Interconnection Customer and Transmission Provider shall follow the procedures of this Section 6.7 until such time that Transmission Provider determines that no further Cluster Re-Studies are required. Transmission Provider shall electronically notify Interconnection Customers in the Cluster Area when no further Cluster Re-Studies are required.

- e) If Transmission Provider determines a Cluster Re-Study other than the Cluster Re-Study described in Section 6.7(a)-(d) is required, Transmission Provider shall notify Interconnection Customers in the applicable Cluster in writing (which may include electronic notification). Transmission Provider shall make Reasonable Efforts to complete the Cluster Re-Study within one hundred twenty (120) Calendar Days from the date of such notice. Except as provided in Section 3.7 in the case of withdrawing Interconnection Customers, any cost of a Cluster Re-Study shall be borne by Interconnection Customer(s) in the Cluster that are being re-studied.

## **Section 7. Phase Two Cluster Study**

### **7.1 Phase Two Cluster Study Agreement**

No later than five (5) Business Days after Transmission Provider has notified Interconnection Customers in the Cluster that no additional Phase One Cluster Re-Study is necessary, as specified in Section 6.7, Transmission Provider shall use Reasonable Efforts to tender to each Interconnection Customer in the Cluster a Phase Two Cluster Study Agreement in the form of Appendix 3 to this LGIP. Transmission Provider at its sole discretion may allow Interconnection Requests in a Cluster Area or Scalable Plan Block to advance to the Phase Two Cluster Study on a separate schedule than other Cluster Areas or Identified Scalable Plan Blocks. The Phase Two Cluster Study Agreement shall require each Interconnection Customer to compensate Transmission Provider for its share of the actual cost of the Phase Two Cluster Study.

#### **7.1.1 Phase Two Cluster Study Deposit**

Interconnection Customer shall submit to Transmission Provider a deposit of:

- a) \$50,000 plus \$1,000 per MW of Generating Facility Capacity of the Generating Facility, up to a maximum of \$250,000.

Transmission Provider shall apply each Interconnection Customer's Phase Two Cluster Study deposit toward such Interconnection Customer's share of the costs of the Phase Two Cluster Study and any Phase Two Cluster Re-Study (as allocated pursuant to Section 4.2.2).

### **7.2 Execution of Phase Two Cluster Study Agreement**

Within fifteen (15) Business Days of Transmission Provider tendering the Phase Two Cluster Study Agreement, Interconnection Customer shall execute and deliver the agreement to Transmission Provider, along with the Phase Two Cluster Study deposit specified in Section 7.1.1. Interconnection Customers who timely submitted a valid Phase Two Cluster Study Agreement and Phase Two Cluster Study deposit shall proceed to the Phase Two Cluster Study. Any Interconnection Request for which there is no executed Phase Two Cluster Study Agreement or Phase Two Cluster Study deposit received shall be deemed

withdrawn. As soon as practicable, Transmission Provider shall initiate the Phase Two Cluster Study described in Sections 7.3 and 7.4 and provide notice to Interconnection Customers in the Cluster.

### **7.3 Scope of Phase Two Cluster Study**

The Phase Two Cluster Study shall evaluate the impact of all proposed Interconnection Requests in the applicable Cluster on the reliability of the Transmission System. The Phase Two Cluster Study will incorporate the information and assumptions contained in the Phase One Cluster Study Report. The Phase Two Cluster Study shall consist of a stability analysis, short circuit analysis, Network Resource Interconnection Service analysis (if applicable), Contingent Facility analysis, and analysis of the necessary Interconnection Facilities and Network Upgrades, the results of which will be documented in a Phase Two Cluster Study Report, or associated Cluster Re-Study Report, as applicable for each Cluster Area.

For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Phase Two Cluster Study shall consider the level of Interconnection Service requested by each Interconnection Customer in the applicable Cluster that has executed a Phase Two Cluster Study Agreement, unless one or more Interconnection Customers' full Generating Facility Capacity is required to be studied due to safety or reliability concerns.

The Phase Two Cluster Study Report will state (i) the assumptions upon which it is based; (ii) the results of the analyses; and (iii) the requirements or potential impediments to providing the Interconnection Service requested by each Interconnection Customer in the Cluster, including a good faith estimate of each Interconnection Customer's share of the cost and the non-binding estimated time to construct. The Phase Two Cluster Study Report shall identify Interconnection Facilities and Network Upgrades expected to be required to reliably interconnect the Generating Facilities in that Phase Two Cluster Study at the requested Interconnection Service level and shall provide non-binding cost estimates for any required Interconnection Facilities and Network Upgrades. The Phase Two Cluster Study Report shall identify each applicable Interconnection Customer's estimated allocated costs for Transmission Provider's Interconnection Facilities and Network Upgrades pursuant to the methodology in Sections 4.2.2 and 4.2.3. The Phase Two Cluster Study Report will provide study results based on Cluster Areas or Scalable Plan Blocks, if applicable, and not on an individualized basis.

### **7.4 Phase Two Cluster Study Procedures**

During the Phase Two Cluster Study process, Transmission Provider shall utilize existing studies to the extent practicable when it performs the Phase Two Cluster Study. Transmission Provider shall coordinate the Cluster Study with any Affected System pursuant to Section 3.6.

- a) Transmission Provider may segment and perform Cluster Studies according to geographically and/or electrically relevant areas on Transmission Provider's Transmission System ("Cluster Area").
- b) Unless Cluster Re-Studies are required pursuant to Section 7.6, Transmission Provider shall use Reasonable Efforts to complete the Phase Two Cluster Study within one-hundred eighty (180) Calendar Days from the commencement of the Phase Two Cluster Study.
- c) At the request of Interconnection Customer or at any time Transmission Provider determines that it will not meet the specified timeframe for completing a Cluster Study, Transmission Provider shall notify Interconnection Customers as to the schedule status of the Phase Two Cluster Study. If Transmission Provider is unable to complete a Phase Two Cluster Study within the specified time period, it shall notify Interconnection Customers in the Cluster and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, Transmission Provider shall provide to an Interconnection Customer in the Cluster all supporting documentation, work papers, and relevant power flow, short circuit and stability databases for the Phase Two Cluster Study, subject to confidentiality arrangements consistent with Section 13.1.

#### **7.5 Phase Two Customer Review Period**

After Transmission Provider posts the Phase Two Cluster Study Report(s) or Cluster Re-Study Report(s) to its OASIS, Transmission Provider shall commence a ninety (90) Calendar Day customer review period ("Customer Review Period"). Transmission Provider may shorten the Customer Review Period upon the written consent of all Interconnection Customers within a specific Cluster, or if a Cluster Re-Study is determined to be necessary in accordance with Section 7.6. During the Customer Review Period, Transmission Provider shall:

- (a) Issue a Phase Two Cluster Study Report (or, as applicable, Cluster Re-Study Report) to each Interconnection Customer and post such report on its OASIS.
- (b) Within ten (10) Business Days of simultaneously posting a Phase Two Cluster Study Report (or, as applicable, Cluster Re-Study Report) on OASIS and furnishing such report to Interconnection Customers in the applicable Cluster, Transmission Provider shall convene an open meeting to discuss the study results ("Cluster Study Report Meeting" or "Cluster Re-Study Meeting").
- (c) Share the good faith estimated cost and schedule of performing the Facilities Study for each Network Upgrade identified in the Phase Two Cluster Study or Cluster Re-Study Report.

- (d) Determine if there are any withdrawals or re-studies required in accordance with Section 7.6.

- 7.5.1** An Interconnection Customer in the applicable Cluster wishing to proceed to a Facilities Study must submit one of the following Commercial Readiness Milestone Options totaling the requested Interconnection Service amount, where applicable, to Transmission Provider no later than the completion of a Customer Review Period following the Phase Two Cluster Study.
- a) Executed term sheet (or comparable evidence) related to a contract for sale, where the term of the sale is not less than five (5) years, for (i) the constructed Generating Facility, (ii) the Generating Facility's energy or capacity, or (iii) the Generating Facility's Ancillary Services;
  - b) Executed contract binding upon the parties for sale to a Load-Serving Entity, competitive retail supplier, power marketer, other wholesale buyer, or a commercial, industrial, or large end-use customer for: (i) the constructed Generating Facility, (ii) the Generating Facility's energy or capacity where the term of sale is not less than five (5) years, or (iii) the Generating Facility's Ancillary Services if the Generating Facility is an electric storage resource where the term of sale is not less than five (5) years;
  - c) Reasonable evidence that the Generating Facility has been selected by or for a Load-Serving Entity in a Resource Plan or is on the final shortlist for a Resource Solicitation Process by or for a Load-Serving Entity, if such a plan or final short list has been approved or acknowledged by the applicable authority (including for an Investor-Owned Utility its state utility commission, as applicable);
  - d) Site specific purchase order for Generating and/or Interconnection Facilities equipment specific to the Queue Position;
  - e) Documentation from Interconnection Customer of reasonable evidence of transmission service reservation (or comparable evidence) for the Generating Facility. Transmission Provider in its sole discretion may evaluate individual facts and circumstances of reasonable evidence of transmission service that originates from the Point of Interconnection, such as: a confirmed Long-Term firm transmission service reservation, confirmed Long-Term conditional firm transmission service reservation with roll over rights, designation of a Network Resource (DNR), a long-term confirmed redirect, or a Long-Term firm

transmission service offer that will be confirmed following a transmission expansion project that has been securitized; or,

- f) In lieu of submitting evidence as specified above in Sections 7.5.1(a)-(e), Interconnection Customer shall provide a Commercial Readiness Deposit equal to twenty percent (20%) of the Network Upgrade costs allocated to Interconnection Customer in the Phase Two Cluster Study Report less any amounts already paid as a Commercial Readiness Deposit for the Phase Two Cluster Study pursuant to Section 6.6.1(g). Commercial Readiness Deposits shall be made in the form of a cash deposit, irrevocable letter of credit, or deposit into an escrow account that is established by Interconnection Customer. Transmission Provider will refund the Commercial Readiness Deposit in accordance with Sections 13.3.2 and 13.3.3 of this LGIP.
- g) If Interconnection Customer's Commercial Readiness Milestone demonstration as specified in Sections 7.5.1(a)-(e) does not meet the total requested Interconnection Service amount where applicable, Interconnection Customer shall supplement their Commercial Readiness Milestone with a Commercial Readiness Deposit in Section 7.5.1(f) that is reduced by a percentage based on the amount already demonstrated.

**7.5.2** An Interconnection Customer in the applicable Cluster shall provide technical data to Transmission Provider prior no later than the completion of the Customer Review Period.

**7.5.3** An Interconnection Customer in the applicable Cluster wishing to proceed to a Facilities Study shall re-demonstrate Site Control that was provided in Section 3.4.1(iii)-(iv).

**7.5.4** After the close of the Customer Review Period, Transmission Provider shall use Reasonable Efforts to confirm each Interconnection Customer in the applicable Cluster has submitted documentation that Interconnection Customer has met one of the Commercial Readiness Milestone Options in Section 7.5.1, analysis required in Section 7.5.2, and re-demonstration of Site Control in Section 7.5.3.

## **7.6 Phase Two Cluster Study Withdrawals and Re-Studies**

- (a) If no Interconnection Customer in the applicable Cluster withdraws (or is deemed withdrawn) from the Cluster after completion of the Phase Two Cluster Study or a Cluster Re-Study, Transmission Provider shall electronically notify Interconnection Customers in the applicable Cluster

within twenty-five (25) Business Days of the close of the Customer Review Period that a Cluster Re-Study is not required.

- (b) If one or more Interconnection Customer withdraw(s) from the Cluster, or is deemed to have withdrawn from the Cluster, Transmission Provider shall have thirty (30) Business Days following the Customer Review Period to determine if a Cluster Re-Study is necessary. If Transmission Provider determines a Cluster Re-Study is not necessary, Transmission Provider shall provide an updated Phase Two Cluster Study Report within thirty (30) Calendar Days of such determination. When the updated Phase Two Cluster Study Report is issued, Transmission Provider shall electronically notify Interconnection Customers in the Cluster that a Cluster Re-Study is not required.
- (c) If Transmission Provider determines a Cluster Re-Study is necessary, Transmission Provider will continue with such Cluster Re-Studies as described in Section 7.6(d) below, until Transmission Provider determines that no further Cluster Re-studies are required.
- (d) The scope of any Cluster Re-Study shall be consistent with the scope of the initial Cluster Study pursuant to Section 7.3. Transmission Provider shall use Reasonable Efforts to complete the Cluster Re-Study for all Cluster Areas within one-hundred eighty (180) Calendar Days of the commencement of the first Cluster Re-Study. Transmission Provider shall commence a Customer Review Period for the Cluster Re-Study and hold an open meeting (“Cluster Re-Study Meeting”) within ten (10) Business Days of posting the Cluster Re-Study Reports on OASIS.
- (e) If additional Cluster Re-Studies are required, Interconnection Customer and Transmission Provider shall follow the procedures of this Section 7.6 until such time that Transmission Provider determines that no further Cluster Re-Studies are required. Transmission Provider shall electronically notify Interconnection Customers in the Cluster when no further Cluster Re-Studies are required.
- (f) If Transmission Provider determines that a Cluster Re-Study other than the Cluster Re-Study described in Section 7.6(a)-(d) is required, Transmission Provider shall notify Interconnection Customers in the Cluster in writing (which may include electronic notification). Transmission Provider shall use Reasonable Efforts to complete such Cluster Re-Study within one-hundred eighty (180) Calendar Days from the date of such notice. Except as provided in Section 3.7 in the case of withdrawing Interconnection Customers, any cost of Cluster Re-Study shall be borne by Interconnection Customer(s) in the Cluster that are being re-studied.

## **Section 8. Interconnection Facilities Study**

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

No later than fifteen (15) Business Days after Transmission Provider has notified Interconnection Customers in the Cluster that no additional Phase Two



Cluster Re-Study is necessary, as specified in Section 7.6, Transmission Provider shall use Reasonable Efforts to tender to each Interconnection Customer in the Cluster an Interconnection Facilities Study Agreement in the form of Appendix 4 to this LGIP. Transmission Provider at its sole discretion may allow Interconnection Requests in a Cluster Area or Scalable Plan Block to advance to the Facilities Study on a separate schedule than other Cluster Areas or Identified Scalable Plan Blocks. The Interconnection Facilities Study Agreement shall provide that Interconnection Customer shall compensate Transmission Provider for the actual cost of the Interconnection Facilities Study. Transmission Provider shall provide to Interconnection Customer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection Facilities Study. Each Interconnection Customer shall execute an Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement and applicable Facilities Study deposit equal to a good faith estimate of the Interconnection Request's allocated share of the cost for Transmission Provider to perform the preliminary engineering that is necessary to complete the Facilities Study report on a non-clustered basis for a Cluster Area or Scalable Plan Blocks for a network plan of service to Transmission Provider no later than thirty (30) Calendar Days after its receipt, along with any required technical data, or shall be deemed withdrawn.

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

The Interconnection Facilities Study shall be specific to each Interconnection Request and performed on an individual, i.e. non-clustered, basis. The Interconnection Facilities Study shall specify and provide a non-binding estimate of the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Phase Two Cluster Study Report (and any associated Cluster Re-Studies) in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facilities to the Transmission System. The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Transmission Provider's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities. The Facilities Study will also identify any potential control equipment for requests for Interconnection Service that are lower than the Generating Facility Capacity.

## **8.3 Interconnection Facilities Study Procedures**

Transmission Provider shall coordinate the Interconnection Facilities Study with any Affected System pursuant to Section 3.6 above. Transmission Provider shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. Transmission Provider shall use

Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to Interconnection Customer within the good faith estimated schedule provided in the Facilities Study Agreement.

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

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

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

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

#### **8.5 Re-Study**

If Transmission Provider determines that Re-Study of the Interconnection Facilities Study is required, Transmission Provider shall so notify Interconnection Customer in writing. Transmission Provider shall make Reasonable Efforts to ensure such Re-Study shall take no longer than sixty (60) Calendar Days from the date of notice. Re-Studies that require rerunning the Cluster Study analysis may take longer than sixty days. Except as provided in Section 3.7 in the case of withdrawing Interconnection Customers, any cost of Re-Study shall be borne by Interconnection Customer being re-studied.

**Section 9. Engineering & Procurement ('E&P') Agreement**

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

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

**Section 10. [Reserved]****Section 11. Standard Large Generator Interconnection Agreement (LGIA)****11.1 Tender**

Interconnection Customer shall tender comments on the draft Interconnection Facilities Study report within thirty (30) Calendar Days of receipt of the report. Within thirty (30) Calendar Days after the comments are submitted, or as otherwise agreed by the Parties, Transmission Provider may tender a draft LGIA, together with draft appendices completed to the extent practicable. The draft LGIA shall be in the form of Transmission Provider's standard form LGIA, which is in Appendix 5.

**11.2 Negotiation**

Notwithstanding Section 11.1, at the request of Interconnection Customer Transmission Provider shall begin negotiations with Interconnection Customer concerning the appendices to the LGIA at any time after Interconnection Customer executes the Interconnection Facilities Study Agreement. Transmission Provider will decide whether to offer a final LGIA after it completes a record of decision under NEPA, or other appropriate NEPA document, concerning the interconnection of the Large Generating Facility. Transmission Provider and Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft LGIA for not more than sixty (60) Calendar Days after tender of the final Interconnection Facilities Study report. If Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft LGIA pursuant to Section 11.1 or initiate Dispute Resolution procedures pursuant to Section 13.5. If Interconnection Customer requests termination of the negotiations, but within sixty (60) Calendar Days thereafter fails to initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if Interconnection Customer has not executed the LGIA or initiated Dispute Resolution procedures pursuant to Section 13.5 within sixty (60) Calendar Days of tender of draft LGIA, it shall be deemed to have withdrawn its Interconnection Request. If Transmission Provider decides to offer a final LGIA, Transmission Provider shall provide to Interconnection Customer a final LGIA within fifteen (15) Business Days after the date on which i) Transmission Provider has completed the record of decision or other NEPA document; or ii) the Parties have completed the negotiation process, whichever is later.

**11.3 Execution**

Within fifteen (15) Business Days after receipt of the final LGIA, Interconnection Customer shall provide Transmission Provider: (A) reasonable evidence of continued Site Control or (B) posting of \$250,000, non-refundable additional security, which shall be applied toward future construction costs. At the same time, Interconnection Customer also shall provide reasonable evidence that one or more of the following milestones in the development of the Large Generating Facility, at Interconnection Customer election, has been achieved: (i) the execution of a contract for the supply or transportation of fuel to the Large Generating Facility; (ii) the execution of a contract for the supply of cooling water to the Large Generating Facility; (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Large Generating Facility; (iv) execution of a contract for the sale of electric energy or capacity from the Large Generating Facility; or (v) application for an air, water, or land use permit.

Interconnection Customer shall execute two originals of the tendered LGIA and return them to Transmission Provider.

**11.4 Commencement of Interconnection Activities**

If Interconnection Customer executes the final LGIA, Transmission Provider and Interconnection Customer shall perform their respective obligations in accordance with the terms of the LGIA.

**Section 12. Construction of Transmission Provider's Interconnection Facilities and Network Upgrades****12.1 Schedule**

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

**12.2 Construction Sequencing****12.2.1 General**

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

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

An Interconnection Customer with an LGIA, in order to maintain its In-Service Date, may request that Transmission Provider advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such In-Service Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than Interconnection Customer that is seeking interconnection to the Transmission System, in time to support such In-Service Date. Upon such request, Transmission Provider will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that Interconnection Customer commits to pay Transmission Provider: (i) any associated expediting costs and (ii) the cost of such Network Upgrades.

Transmission Provider will refund to Interconnection Customer both the expediting costs and the cost of Network Upgrades, in accordance with Article 11.4 of the LGIA. Consequently, the entity with a contractual obligation to construct such Network Upgrades shall be obligated to pay only that portion of the costs of the Network Upgrades that Transmission Provider has not refunded to Interconnection Customer. Payment by that entity shall be due on the date that it would have been due had there been no request for advance construction. Transmission Provider shall forward to

Interconnection Customer the amount paid by the entity with a contractual obligation to construct the Network Upgrades as payment in full for the outstanding balance owed to Interconnection Customer. Transmission Provider then shall refund to that entity the amount that it paid for the Network Upgrades, in accordance with Article 11.4 of the LGIA.

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

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

**12.2.4 Amended Interconnection Study**

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

**Section 13. Miscellaneous**

**13.1 Confidentiality**

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

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

If requested by either Party, the other Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate

Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

### **13.1.1 Scope**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the LGIA; or (6) is required, in accordance with Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the

LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.

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

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

### **13.1.3 Rights**

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

other person or entity of the right to protect the Confidential Information from public disclosure.

**13.1.4 No Warranties**

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

**13.1.5 Standard of Care**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under these procedures or its regulatory requirements.

**13.1.6 Legally Required Disclosure**

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires either Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirement(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of the 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. If Confidential Information concerning a Transmission Owner or Interconnection Customer is requested from Transmission Provider under the Freedom of Information Act (5 U.S.C. § 552), Transmission Provider shall provide the other Party with prompt notice of the request and opportunity for the Party to submit the Party's view on whether the Confidential Information is exempt from disclosure under FOIA. Transmission Provider may disclose such Confidential Information which, in the opinion of its counsel, Transmission Provider is legally compelled to disclose under FOIA.

**13.1.7 Remedies**

The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's Breach of its obligations



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

**13.1.8 Disclosure to FERC, its Staff, or a State**

Notwithstanding anything in this Section 13.1 to the contrary, and pursuant to 18 CFR §1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the LGIP, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 CFR §388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Party to the LGIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR §388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

**13.1.9** Subject to the exception in Section 13.1.8, any information that a Party claims is competitively sensitive, commercial or financial information ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably

withheld; or (iv) necessary to fulfill its obligations under this LGIP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

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

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

### **13.2 Delegation of Responsibility**

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

### **13.3 Obligation for Study Costs and Refunds**

**13.3.1** Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Studies (or actual allocated costs, in the case of Cluster Studies pursuant to Section 4.2.2.). Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded, except as otherwise provided herein, to Interconnection Customer. If an Interconnection Customer's study deposit paid pursuant to Sections 6.1.1, 7.1.1, and 8.1 is greater than Interconnection Customer's share of actual costs (including applicable costs associated with Cluster Re-Studies or restudies of the Interconnection Facilities Study), any excess amounts shall be applied to

Interconnection Customer's future Interconnection Studies costs, or refunded to Interconnection Customer.

- 13.3.2** In the event of Interconnection Customer's withdrawal pursuant to Section 3.7, Transmission Provider shall refund to Interconnection Customer the refundable portion of the following charges: (a) any study deposit paid pursuant to Sections 6.1.1, 7.1.1, and 8.1; (b) Commercial Readiness Deposit paid pursuant to Section 6.6.1(g) and Section 7.5.1(f). Such refundable portion for study deposits made under Sections 6.1.1, 7.1.1, and 8.1 shall be any amount that exceeds Interconnection Customer's share of the costs that Transmission Provider has incurred including interest, calculated from the date the study deposit is received until the date a refund is made, at a rate equivalent to what Transmission Provider would earn on interest income as specified for the most recent Bonneville Transmission rate case and documented in the Transmission Revenue Requirement Study Documentation, or its successor. Such refundable portion of Commercial Readiness Deposits made in lieu of an Interconnection Customer providing evidence of Commercial Readiness Milestone Options under Sections 6.6.1 and 7.5.1, Transmission Provider shall be for any unspent amount, without interest. Any refunds of Commercial Readiness Deposits shall also be made in accordance with Section 13.3.3 below.
- 13.3.3** The refundable portion of the Commercial Readiness Deposits paid by Interconnection Customer pursuant to Section 6.6.1 and 7.5.1 shall be refunded on the earlier of: (i) Interconnection Customer is able to demonstrate evidence of a Commercial Readiness Milestone Option in Section 6.6.1(a)-(f); (ii) the Interconnection Request is withdrawn from the queue pursuant to Section 3.7; or (iii) upon execution of the LGIA. Such Commercial Readiness Deposits made in lieu of an Interconnection Customer providing evidence of Commercial Readiness Milestone Options under Sections 6.6.1(a)-(f) and 7.5.1(a)-(e) are not subject to interest on any unspent amount.
- 13.3.4** Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. Interconnection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice therefor. Transmission Provider shall not be obligated to perform or continue to perform any studies unless Interconnection Customer has paid all undisputed amounts in compliance herewith.

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

If (i) at the time of the signing of an Interconnection Study Agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii) Interconnection Customer receives notice pursuant to Sections 6.5, 7.4 or

8.3 that Transmission Provider will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or (iii) Interconnection Customer receives neither the Interconnection Study nor a notice under Sections 6.5, 7.4 or 8.3 within the applicable timeframe for such Interconnection Study, then Interconnection Customer may require Transmission Provider to utilize a third party consultant reasonably acceptable to Interconnection Customer and Transmission Provider to perform such Interconnection Study under the direction of Transmission Provider. At other times, Transmission Provider may also utilize a third party consultant to perform such Interconnection Study, either in response to a general request of Interconnection Customer, or on its own volition.

In all cases, use of a third party consultant shall be in accord with Article 26 of the LGIA (Subcontractors) and limited to situations where Transmission Provider determines that doing so will help maintain or accelerate the study process for Interconnection Customer's pending Interconnection Request and not interfere with Transmission Provider's progress on Interconnection Studies for other pending Interconnection Requests. In cases where Interconnection Customer requests use of a third party consultant to perform such Interconnection Study, Interconnection Customer and Transmission Provider shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. Transmission Provider shall convey all work papers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection Request as soon as soon as practicable upon Interconnection Customer's request subject to the confidentiality provision in Section 13.1. In any case, such third party contract may be entered into with either Interconnection Customer or Transmission Provider at Transmission Provider's discretion. In the case of (iii) Interconnection Customer maintains its right to submit a claim to Dispute Resolution to recover the costs of such third party study. Such third party consultant shall be required to comply with this LGIP, Article 26 of the LGIA (Subcontractors), and the relevant Tariff procedures and protocols as would apply if Transmission Provider were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes. Transmission Provider shall cooperate with such third party consultant and Interconnection Customer to complete and issue the Interconnection Study in the shortest reasonable time.

## **13.5 Disputes**

### **13.5.1 Submission**

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the LGIA, the LGIP, or their performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated

senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.

### **13.5.2 External Arbitration Procedures**

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

### **13.5.3 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 therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the LGIA and LGIP and shall have no power to modify or change any provision of the LGIA and LGIP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute

Resolution Act.

#### **13.5.4 Costs**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable:

(1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

#### **13.5.5 Non-Binding Dispute Resolution Procedures**

If a Party has submitted a Notice of Dispute pursuant to Section 13.5.1, and the Parties are unable to resolve the claim or dispute through unassisted or assisted negotiations within the thirty (30) Calendar Days provided in that Section, and the Parties cannot reach mutual agreement to pursue the Section 13.5 arbitration process, a Party may request that Transmission Provider engage in Non-binding Dispute Resolution pursuant to this Section by providing written notice to Transmission Provider (“Request for Non-binding Dispute Resolution”). Conversely, either Party may file a Request for Non-binding Dispute Resolution pursuant to this Section without first seeking mutual agreement to pursue the Section 13.5 arbitration process. The process in Section 13.5.5 shall serve as an alternative to, and not a replacement of, the Section 13.5 arbitration process. Pursuant to this process, Transmission Provider must promptly, after receipt of the Request for Non-binding Dispute Resolution appoint a neutral decision-maker that is an independent subcontractor that shall not have any current or past substantial business or financial relationships with either Party. Unless otherwise agreed by the Parties, the decision-maker shall render a decision within sixty (60) Calendar Days of appointment and shall notify the Parties in writing of such decision and reasons therefore. This decision-maker shall be authorized only to interpret and apply the provisions of the LGIP and LGIA, except for those related to NEPA and other environmental laws. In addition, this decision maker shall have no power to modify or change any provision of the LGIP and LGIA in any manner. The result reached in this process is not binding, but, unless otherwise agreed, the Parties may cite the record and decision in the non-binding dispute resolution process in future dispute resolution processes, including in a Section 13.5 arbitration. Each Party shall be responsible for its own costs incurred during the process and the cost of the decision-maker shall be divided equally among each Party to the dispute.

## **13.6 Local Furnishing Bonds**

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

This provision is applicable only to a Transmission Provider that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in Section 142(f) of the Internal Revenue Code ("local furnishing bonds").

Notwithstanding any other provision of this LGIA and LGIP, Transmission Provider shall not be required to provide Interconnection Service to Interconnection Customer pursuant to this LGIA and LGIP if the provision of such Transmission Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance Transmission Provider's facilities that would be used in providing such Interconnection Service.

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

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

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

## **Section 14. Generating Facility Repower Request**

### **14.1 General**

Interconnection Customer shall only submit a Generating Facility Repower Request (Repower Request) for an existing Generating Facility that is established in an executed LGIA.

### **14.2 Timing**

Interconnection Customer shall submit its Repower Request and a \$10,000 deposit to Transmission Provider at least one year prior to the date that the existing Generating Facility will cease operation. Interconnection Customer's Repower Request shall include a good faith estimate for the completion of construction.

#### **14.2.1 Assignments, Sales, and Transfers**

Interconnection Customer shall not make a Repower Request until twelve (12) months have elapsed from: (1) the date of any

assignment of the LGIA applicable to the existing Generating Facility, or (2) the date of sale, or other transfer of such existing Generating Facility.

Upon submission of a Repower Request from Interconnection Customer to Transmission Provider, Interconnection Customer shall not sell or otherwise transfer the existing Generating Facility, nor assign the applicable LGIA until Transmission Provider completes evaluation of the Repower Request, or Interconnection Customer withdraws the Repower Request in writing.

In the event that Transmission Provider notifies Interconnection Customer that the Repower Request has been granted, the prohibition on sale, transfer, or assignment shall be extended 12 months from the date the Repower Request is granted. For purposes of this Section, prohibited assignments include assignments to affiliates pursuant to Article 19.1 of the LGIA or any analogous provision in the applicable LGIA.

A transfer, sale, or assignment of the existing Generating Facility, repowered Generating Facility, or assignment of an applicable LGIA that violates this Section shall void the Repower Request.

#### **14.3 Interconnection Service**

Transmission Provider shall not grant a Repower Request that exceeds the level of Interconnection Service established in the executed LGIA for the existing Generating Facility. If the Repower Request requires Interconnection Service (MW) in excess of that of the existing Generating Facility, Interconnection Customer shall initiate a separate Interconnection Request in accordance with Section 3 for the amount of (MW) equal to the excess. Transmission Provider shall assign a Queue Position in accordance with Section 4.

#### **14.4 Evaluation Process**

Within ten (10) Business Days after receipt of a valid Repower Request, Transmission Provider will schedule a scoping meeting to discuss the Repower Request with Interconnection Customer. Transmission Provider and Interconnection Customer will bring to the meeting such technical data as may be reasonably required to accomplish the purpose of the meeting.

At that scoping meeting, Transmission Provider will evaluate whether the Repower Request is a potential Material Modification.

(A) If Transmission Provider determines that the Repower Request is a potential Material Modification, Interconnection Customer shall withdraw the Repower Request, or proceed with a new Interconnection Request in accordance with Section 3. Transmission Provider shall assign a Queue Position in accordance with Section 4.



- (B) If Transmission Provider determines that the Repower Request is not a potential Material Modification, Interconnection Customer may proceed to the study process in Section 14.5.

## **14.5 Study Process**

Repower Requests will consist of an environmental study as set forth in Section 14.5.1 and may consist of two additional studies: (1) A system impact study for the Repower Request (Repower Impact Study) as set forth in Section 14.5.2, and (2) a Facilities Study for the Repower Request (Repower Facilities Study) as set forth in Section 14.5.3.

### **14.5.1 Environmental Study Agreement**

As soon as practicable, Transmission Provider shall tender to Interconnection Customer an environmental study agreement authorizing Transmission Provider, at Interconnection Customer's expense, to perform environmental review of the proposed Repower Request, including review under NEPA, and setting forth Interconnection Customer's responsibilities in connection with such environmental review. Interconnection Customer shall execute and return the environmental study agreement within 30 Calendar Days of receipt, or its Repower Request shall be deemed withdrawn and the unexpended amount of its deposit, if any, shall be returned.

### **14.5.2 Repower Impact Study**

As soon as practicable, Transmission Provider shall tender to Interconnection Customer a Repower Impact Study agreement authorizing Transmission Provider, at Interconnection Customer's expense, to perform the study. The Repower Impact Study will include analyses to determine if the repowered Generating Facility has a material adverse impact on the Transmission System when compared to the existing Generating Facility. The Repower Impact Study may include steady-state (thermal/voltage), reactive power, short circuit/fault duty, and stability analyses, as necessary, to ensure that required reliability conditions are studied.

Transmission Provider shall use Reasonable Efforts to complete the Repower Impact Study within ninety (90) Calendar Days after Transmission Provider receives the fully executed Repower Impact Study Agreement.

If the Repower Impact Study identifies any materially adverse impacts from operating the repowered Generating Facility, when compared to the existing Generating Facility, such impacts shall be deemed a Material Modification. In order to move forward, Interconnection Customer must submit a new Interconnection Request in accordance with Section 3. Transmission Provider shall assign a Queue Position in accordance with Section 4.

**14.5.3 Repower Facilities Study**

As soon as practicable, Transmission Provider shall tender to Interconnection Customer a Repower Facilities Study, authorizing Transmission Provider, at Interconnection Customer's expense, to perform the study. The Repower Facilities Study will identify estimates for cost and the time required to construct the Interconnection Facilities for the Generating Facility repower.

Transmission Provider shall use Reasonable Efforts to complete the Repower Facilities Study within ninety (90) Calendar Days after Transmission Provider receives the fully executed Repower Facilities Study Agreement.

**14.6 Tender**

Within thirty (30) Calendar Days after the completion of any required studies set forth in Section 14.5.2 and 14.5.3, Transmission Provider may revise Interconnection Customer's existing LGIA and tender the draft to Interconnection Customer.

**14.7 LGIA**

Transmission Provider will decide whether to offer a final LGIA after it completes a record of decision under NEPA, or other appropriate NEPA document, concerning the Repower Request. If Interconnection Customer executes the final LGIA, Transmission Provider and Interconnection Customer shall perform their respective obligations in accordance with the terms of the revised LGIA.

**Section 15. Generating Facility Replacements****15.1 General**

Interconnection Customer shall only submit a Generating Facility Replacement Request (Replacement Request) for an existing Generating Facility established in an executed LGIA. Transmission Provider shall assign a Queue Position in accordance with Section 4.

The replacement Generating Facility must connect to Transmission Provider's Transmission System at the same electrical Point of Interconnection (*i.e.*, same voltage level at the interconnecting substation) as the existing Generating Facility established in the executed LGIA.

**15.2 Timing**

Interconnection Customer shall submit its Replacement Request and a \$10,000 deposit to Transmission Provider at least one (1) year prior to the date that the existing Generating Facility will cease operation.

The request for a Generating Facility Replacement shall include the planned or actual date of cessation of operation for the existing Generating Facility and the

expected Commercial Operation Date for the replacement Generating Facility.

#### **15.2.1 Assignments, Sales, and Transfers**

Interconnection Customer shall not make a Replacement Request until twelve (12) months have elapsed from: (1) the date of any assignment of the LGIA applicable to the existing Generating Facility, or (2) the date of sale or other transfer of such existing Generating Facility.

Upon submission of a Replacement Request from Interconnection Customer to Transmission Provider, Interconnection Customer shall not sell or otherwise transfer the existing Generating Facility, or the replacement Generating Facility, nor assign the applicable LGIA until Transmission Provider completes evaluation of the Replacement Request, or Interconnection Customer withdraws the Replacement Request in writing.

In the event that Transmission Provider notifies Interconnection Customer that the Replacement Request has been granted, the prohibition on sale, transfer, or assignment shall be extended in accordance with this Section. For purposes of this Section, prohibited assignments include assignments to affiliates pursuant to Article 19.1 of LGIA or any analogous provision in the applicable LGIA.

A transfer, sale, or assignment of the existing Generating Facility, Replacement Generating Facility, or assignment of an applicable LGIA that violates this Section 14.1(vi) shall void the request for Generating Facility Replacement.

### **15.3 Interconnection Service**

Interconnection Customer shall request only ER Interconnection Service for the Replacement Generating Facility if the existing Generating Facility has only ER Interconnection Service.

The request for NR Interconnection Service for the Replacement Generating Facility, when the existing Generating Facility has only ER Interconnection Service, shall be submitted as a separate Request and shall proceed in the same manner as an Interconnection Request for a new Generating Facility.

Interconnection Customer may request either ER Interconnection Service or NR Interconnection Service for the Replacement Generating Facility if the existing Generating Facility has NR Interconnection Service.

If the replacement Generating Facility requires Interconnection Service (MW) in excess of that of the existing Generating Facility, Interconnection Customer shall initiate a separate Interconnection Request in accordance with Section 3 for the amount (MW) equal to the excess. Transmission Provider shall assign a

Queue Position in accordance with Section 4.

If the request for Replacement Request is for less Interconnection Service (MW) than that of the existing Generating Facility, Interconnection Customer shall notify Transmission Provider of the (MW) amount of such decrease in generating capacity.

#### **15.4 Modifications**

Interconnection Customer may modify or withdraw its request for a Generating Facility Replacement any time before the evaluation process is complete. Interconnection Customer must make these requests in writing.

##### **15.4.1 Revisions to the Planned Date of Cessation**

If the revised planned date of cessation of operation for the existing Generating Facility is prior to the planned date of cessation of operation specified in the original request Replacement Request, Interconnection Customer must submit a new Replacement Request at least one (1) year prior to the date that the existing Generating Facility is planned to cease operation.

##### **15.4.2 Revisions to the Expected Commercial Operation Date:**

If the revised expected Commercial Operation Date for the replacement Generating Facility is after the expected Commercial Operation Date for the replacement Generating Facility in the original Replacement Request, Interconnection Customer must submit a new Replacement Request at least one (1) year prior to the date that the existing Generating Facility is planned to cease operation.

#### **15.5 Evaluation Process**

Within ten (10) Business Days after receipt of a valid Replacement Request, Transmission Provider will schedule a scoping meeting to discuss the Replacement Request with Interconnection Customer. Transmission Provider and Interconnection Customer will bring to the meeting such technical data as may be reasonably required to accomplish the purpose of the meeting.

#### **15.6 Study Process**

The Replacement Request will consist of an environmental study as set forth in Section 15.6.1 and may consist of three additional studies: (1) System impact study for the Replacement Request (Replacement Impact Study) as set forth in Section 15.6.2, (2) Reliability Assessment Study for the Replacement Request (Reliability Assessment) as set forth in Section 15.6.3, and (3) Facilities Study for the Replacement Request (Replacement Facilities Study) as set forth in Section 15.6.4.

##### **15.6.1 Environmental Study Agreement**

As soon as practicable, Transmission Provider shall tender to

Interconnection Customer an environmental study agreement authorizing Transmission Provider, at Interconnection Customer's expense, to perform environmental review of the proposed Replacement Request, including review under the National Environmental Policy Act (NEPA), and setting forth Interconnection Customer's responsibilities in connection with such environmental review. Interconnection Customer shall execute and return the environmental study agreement within 30 Calendar Days of receipt, or its Replacement Request shall be deemed withdrawn and the unexpended amount of its deposit, if any, shall be returned.

#### **15.6.2 Replacement Impact Study**

As soon as practicable, Transmission Provider shall tender to Interconnection Customer a Replacement Impact Study authorizing Transmission Provider, at Interconnection Customer's expense, to perform the study. The Replacement Impact Study will include analyses to determine if the replacement Generating Facility has a material adverse impact on the Transmission System when compared to the existing Generating Facility. The Replacement Impact Study may include steady-state (thermal/voltage), reactive power, short circuit/fault duty, and stability analyses, as necessary, to ensure that required reliability conditions are studied.

Transmission Provider shall use Reasonable Efforts to complete the replacement Impact Study within ninety (90) Calendar Days after Transmission Provider receives the fully executed Replacement Impact Study Agreement.

If the Replacement Impact Study identifies any materially adverse impact from operating the Replacement Generating Facility when compared to the operation of the existing Generating Facility, such impacts shall be deemed a Material Modification, and in order to move forward, Interconnection Customer must submit a new Interconnection Request in accordance with Section 3. Transmission Provider shall assign a Queue Position in accordance with Section 4.

#### **15.6.3 Reliability Assessment Study**

As soon as practicable, Transmission Provider shall tender to Interconnection Customer a reliability assessment study agreement for the Replacement Request (Reliability Assessment Study) authorizing Transmission Provider, at Interconnection Customer's expense, to perform the Reliability Assessment Study. The Reliability Assessment Study will include analyses to compare the conditions on the Transmission System that would exist if the existing Generating Facility is taken offline to the conditions on the Transmission System as they exist when the existing Generating Facility is online. The scope of the Reliability Assessment Study may

include stability analysis as necessary. Transmission Provider will also evaluate the performance of the Transmission System to determine if thermal and/or voltage violations of applicable NERC Standards and Transmission Owner planning criteria are caused by removing the existing Generating Facility from service prior to the Commercial Operation Date of the replacement Generating Facility.

Transmission Provider shall use Reasonable Efforts to complete the Reliability Assessment Study within ninety (90) Calendar Days after Transmission Provider receives the fully executed Reliability Assessment Study.

Interconnection Customer must mitigate any reliability violation identified in the Reliability Assessment Study, the existing Generating Facility may not cease operations until all mitigations are implemented or are in service.

#### **15.6.4 Replacement Facilities Study**

As soon as practicable, Transmission Provider shall tender to Interconnection Customer a Replacement Facilities Study, authorizing Transmission Provider, at Interconnection Customer's expense, to perform the study. The Replacement Facilities Study will identify estimates for cost and the time required to construct the Interconnection Facilities for the Generating Facility replacement.

Transmission Provider shall use Reasonable Efforts to complete the Replacement Facilities Study within ninety (90) Calendar Days after Transmission Provider receives the fully executed Replacement Facilities Study Agreement.

#### **15.7 Tender**

Within thirty (30) Calendar Days after the completion of any required studies set forth in Section 15.6.2, 15.6.3, and 15.6.4 Transmission Provider may revise Interconnection Customer's existing LGIA and tender the draft to Interconnection Customer.

#### **15.8 LGIA**

Transmission Provider will decide whether to offer a final LGIA after it completes a record of decision under NEPA, or other appropriate NEPA document, concerning the Replacement Request. If Interconnection Customer executes the final LGIA, Transmission Provider and Interconnection Customer shall perform their respective obligations in accordance with the terms of the revised LGIA.

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

1. The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility with Transmission Provider's Transmission System pursuant to Attachment L of Transmission Provider's Tariff.
  
2. This Interconnection Request is for (check one):
  - A proposed new Large Generating Facility.
  - An increase in the generating capacity of an existing Large Generating Facility or a Material Modification of an existing Large Generating Facility.
  - Surplus Interconnection Service (If checked, skip to #13 of this form)
  - A Generating Facility Repower.
  - A Generating Facility Replacement.

Name of the new or existing Large Generating Facility:

\_\_\_\_\_

If a Material Modification, describe proposed changes:

\_\_\_\_\_

The LGIA Contract # for the existing Large Generating Facility (Surplus requests, Repowers & Replacements only): \_\_\_\_\_

3. The type of interconnection service requested (check one):
  - Energy Resource Interconnection Service (ERIS)
  - Network Resource Interconnection Service (NRIS)

For NRIS, enter the eligible Network Transmission Load Servicing Entity:

\_\_\_\_\_

*Note: When requesting a Repower or Replacement, NRIS is only available if the original LGIA was for NRIS.*

4.  Check here only if Interconnection Customer requesting NRIS also seeks to have its Generating Facility studied for ERIS.
  
5. Interconnection Customer provides the following information:
  - a. Address and latitude/longitude of the proposed new Large Generating Facility site (to the extent known) or, in the case of an existing Generating

Facility, the name and latitude/longitude of the existing Generating Facility (Must provide the County and State of the proposed project.);

- b. Enter megawatt of the electrical output of the proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity and/or Interconnection Service level of an existing Generating Facility. Station service load, parasitic load, and charging load should be added together and entered as a negative number:

Season	Interconnection Service in MW (max/min)	Generating Facility Capacity (nameplate) in MW (max/min)	Degrees Celsius of seasonal rating
Spring			
Summer			
Fall			
Winter			

- c. If applicable, maximum summer at \_\_\_\_\_ degrees C and winter at \_\_\_\_\_ degrees C megawatt electrical charging of the new energy storage system or the amount of megawatt increase in the charging capacity of an existing Generating Facility;
- d. General description of the equipment configuration;
- e. Specify fuel type for proposed project;
- f. Commercial Operation Date (Day, Month, and Year);
- g. Name, job title, address, telephone number, and e-mail address of Interconnection Customer's contact person;
- h. Approximate location of the proposed Point of Interconnection (optional); and
- i. Generation Model and Performance Attestation set forth in Attachment A.

For all generation types a steady state model of the Large Generating Facility including equivalent plant-level model, equivalent collector system if applicable, step-up transformers, and generation tie line in either PowerWorld or GE PSLF format; and

- j. Requested capacity (in MW) of Interconnection Service (if lower than the Generating Facility Capacity).
6. Non-refundable application fee as specified in the LGIP.



- 7. Evidence of Site Control as required by Transmission Provider is attached to this Interconnection Request.
- 8. Requested Point of Interconnection (optional):
- 9. Additional information regarding the significance/importance of requested Point of Interconnection for consideration by Transmission Provider (optional):

- 10. This Interconnection Request shall be submitted to the following email address:

GI\_ClusterStudies@bpa.gov

- 11. Transmission Provider Representative of Interconnection Customer to contact:

Transmission Account Executive for (Interconnection Customer: \_\_\_\_\_)

Bonneville Power Administration

Transmission Sales – TSE/TPP2

7500 NE 41<sup>st</sup> Street, Suite 130

Vancouver, WA 98662

- 12. This Interconnection Request is submitted by:

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

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

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

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

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

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

13. **Surplus Interconnection Service Request only** (Please refer to Section 3.3.3 of the LGIP for a complete list of what to include when submitting a Surplus Interconnection Service Request):

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

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

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

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

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

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

Name of the existing Large Generating Facility pertaining to the Surplus Interconnection Service Request:

\_\_\_\_\_

Name of the existing Interconnection Customer: \_\_\_\_\_

LGIA Contract Number pertaining to the Surplus Interconnection Service Request:

\_\_\_\_\_

The Existing Point of Interconnection in the LGIA: \_\_\_\_\_

If the Surplus Interconnection Service Request is made by an affiliate of the existing Interconnection Customer the request must include a letter of intent to allow a specified portion of its Interconnection Service to be used by Surplus Interconnection Customer.

If the Surplus Interconnection Service Request is made by a non-affiliate, then the letter must also include a statement that the existing Interconnection Customer is waiving its priority right, on behalf of itself and any affiliate to utilize the Surplus Interconnection Service. See LGIP Section 3.3.3 (D) for details.

The type of Surplus Interconnection Service Requested (check one):

- Energy Resource Interconnection Service (ERIS)
- Network Resource Interconnection Service (NRIS)

For NRIS, enter the eligible Network Transmission Load Servicing Entity:

\_\_\_\_\_

*Note: When requesting Surplus, NRIS is only available if the original LGIA was for NRIS.*

Check here only if Surplus Interconnection Customer requesting NRIS also seeks to have its Generating Facility studied for ERIS.

If known, the address and latitude/longitude of surplus generating facility site:

\_\_\_\_\_

- a. Enter megawatt of the electrical output of the proposed Surplus Large Generating Facility. Station service load, parasitic load, and charging load should be added together and entered as a negative number:

\_\_\_\_\_

Season	Interconnection Service in MW (max/min)	Generating Facility Capacity (nameplate) in MW (max/min)	Degrees Celsius of seasonal rating
Spring			
Summer			
Fall			
Winter			

- b. General description of the equipment configuration;

\_\_\_\_\_

- c. Commercial Operation Date requested (Day, Month, and Year);

\_\_\_\_\_

- d. Name, job title, address, telephone number, and e-mail address of Surplus Interconnection Customer's contact person;

\_\_\_\_\_

- e. Generation Model and Performance Attestation set forth in Attachment A.

For all generation types a steady state model of the Large Generating Facility including equivalent plant-level model, equivalent collector system if applicable, step-up transformers, and generation tie line in either PowerWorld or GE PSLF format; and

- f. Requested capacity (in MW) of Interconnection Service (if lower than the Generating Facility Capacity).

\_\_\_\_\_

- 14. Applicable deposit amount as specified in the LGIP.
  - 15. Evidence of Site Control as specified in the LGIP (check one)
    - Is attached to this Surplus Interconnection Request
    - Will be provided at a later date in accordance with this LGIP
  - 16. This Surplus Interconnection Request shall be submitted to the following email address:
- GI\_ClusterStudies@bpa.gov
- 17. Transmission Provider Representative of Surplus Interconnection Customer to contact:  
Transmission Account Executive for (Interconnection Customer: \_\_\_\_\_)

Bonneville Power Administration

Transmission Sales – TSE/TPP2

7500 NE 41<sup>st</sup> Street, Suite 130

Vancouver, WA 98662

**Attachment A to Appendix 1  
Interconnection Request****GENERATION MODEL AND PERFORMANCE ATTESTATION  
FOR A GENERATING FACILITY**

Interconnection Customer has read, understands and accepts the following modeling and performance requirements for the Generating Facility associated with Interconnection Customer's Interconnection Request:

- 1) The Generating Facility shall be designed to meet performance requirements specified in Technical Requirements for Interconnection to the BPA Transmission Grid (STD-N-000001).
- 2) Transmission Provider will use generic performance models for the Phase One Cluster Study or as deemed appropriate by Transmission Provider, at various points in the life of the Interconnection Request. The generic models meet performance requirements specified in Technical Requirements for Interconnection to the BPA Transmission Grid (STD-N-000001).
- 3) Within ninety (90) Calendar Days of receipt of Phase One Cluster Study, Interconnection Customer will provide the required powerflow models, dynamics models, and electromagnetic transient (EMT) models as specified in STD-N-000001. The models for the Generating Facility shall:
  - a) be provided according to Technical Requirements for Interconnection to the BPA Transmission Grid (STD-N-000001)
  - b) be accurate and validated, by Interconnection Customer, to represent the performance characteristics of the Generating Facility
  - c) be re-validated, updated, and submitted to Transmission Provider, by Interconnection Customer, after a Qualified Change to the Generating Facility as required by BPA in STD-N-000001
- 4) Prior to getting authorization for Commercial Operation, Interconnection Customer shall:
  - a) complete voltage control and frequency control tests (STD-N-000001-01) as specified in BPA's Generation Commissioning Task Checklist Required for Commercial Operations (STD-N-000001-03) demonstrating the Generating Facility meets BPA's Technical Requirements for Interconnection to the BPA Transmission Grid (STD-N-000001)
  - b) provide evidence of completed EMT studies using "as-built" models confirming the plant meets disturbance ride-through requirements specified by STD-N-000001
- 5) Subsequent to Commercial Operation, Interconnection Customer shall:
  - a) provide "as-built" powerflow and dynamic models for its Generating Facility that are accurate and validated, by Interconnection Customer, as required by STD-N-000001 and applicable NERC MOD Standards
  - b) provide "as-built" EMT models that are accurate and validated, by Interconnection Customer, to represent the performance characteristics of the Generating Facility, including disturbance ride through characteristics, as required by STD-N-000001

- 6) If Interconnection Customer fails to meet requirements (1) to (5) above, the Generating Facility will:
  - a) be removed for Transmission Provider’s generation interconnection queue
  - b) not be allowed to electrically close into the transmission system until model and performance deficiencies are corrected

This Generation Model and Performance Attestation is submitted by:

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

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

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

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

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

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

**APPENDIX 2 to LGIP  
PHASE ONE CLUSTER STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into by and between \_\_\_\_\_, ("Interconnection Customer,") and the U.S. Department of Energy, acting by and through the Bonneville Power Administration, ("Transmission Provider "). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

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

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

Interconnection Customer has requested Transmission Provider to perform a Phase One Cluster Study to assess the feasibility of interconnecting the proposed Large Generating Facility to the Transmission System, and of any Affected Systems;

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed Phase One Cluster Study consistent with Section 6 of this LGIP in accordance with the Tariff.
- 3.0 The Phase One Cluster Study shall be based on the technical information provided by Interconnection Customer in the Interconnection Request, including the optional requested Point of Interconnection set forth in Attachment A to this Agreement. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Phase One Cluster Study and as designated in accordance with Section 3.4.4 of the LGIP. If Interconnection Customer modifies its Interconnection Request pursuant to Section 4.4, the time to complete the Phase One Cluster Study may be extended.

4.0 The Phase One Cluster Study Report shall provide the following information:

- Point of Interconnection as designated by Transmission Provider.
- preliminary identification of any equipment short circuit capability limits exceeded as a result of the interconnection;
- preliminary identification of any applicable thermal or voltage facility ratings exceeded as a result of the interconnection; and
- preliminary description and non-bonding estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit and power flow issues.

5.0 Interconnection Customer shall provide a deposit in accordance with Section 6.1.1 of the LGIP for the performance of the Phase One Cluster Study.

Upon receipt of the Phase One Cluster Study or Phase One Cluster Re-Study, Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Phase One Cluster Study and Phase One Cluster Re-Study, as applicable.

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

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

### **Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.



(INTERCONNECTION CUSTOMER NAME) UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
(*Print/Type*)

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

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

**Attachment A to Appendix 2  
Phase One Cluster Study  
Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE  
PHASE ONE CLUSTER STUDY**

The Phase One Cluster Study will be based upon the information set forth in the Interconnection Request.

Requested Point of Interconnection optionally provided in the Interconnection Request and configuration to be studied.

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

**APPENDIX 3 to LGIP  
PHASE TWO CLUSTER STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into by and between \_\_\_\_\_, ("Interconnection Customer,") and the U.S. Department of Energy, acting by and through the Bonneville Power Administration, ("Transmission Provider "). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

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

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

Transmission Provider has completed a Phase One Cluster Study and provided the results of said study to Interconnection Customer; and

Interconnection Customer has requested Transmission Provider to perform a Phase Two Cluster Study to assess the impact of interconnecting the Large Generating Facility to the Transmission System, and of any Affected Systems;

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed a Phase Two Cluster Study consistent with Section 7 of this LGIP in accordance with the Tariff.
- 3.0 Interconnection Customer has submitted to Transmission Provider a Commercial Readiness Milestone Option, in accordance with Section 6.6.1 of the LGIP.
- 4.0 Interconnection Customer has submitted to Transmission Provider validated detailed models representing the Generating Facility, in accordance with Section 6.6.2 of the LGIP.
- 5.0 Interconnection Customer has submitted to Transmission Provider a re-demonstration of Site Control in accordance with Section 6.6.3 of the LGIP.

- 6.0 The scope of the Phase Two Cluster Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 7.0 The Phase Two Cluster Study will be based upon the results of the Phase One Cluster Study Report and the technical information provided by Interconnection Customer in the Interconnection Request, subject to any modifications in accordance with Section 4.4 of the LGIP. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Phase Two Cluster Study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Phase Two Cluster Study may be extended.
- 8.0 The Phase Two Cluster Study Report shall provide the following information:
- identification of any equipment short circuit capability limits exceeded as a result of the interconnection;
  - identification of any thermal or voltage applicable facility ratings exceeded as a result of the interconnection;
  - identification of any instability or inadequately damped response to system disturbances resulting from the interconnection; and
  - description and non-binding, good faith estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit, instability, and power flow issues.
- 9.0 Interconnection Customer shall provide a deposit in accordance with Section 7.1.1 of the LGIP for the performance of the Phase Two Cluster Study

Upon receipt of the Phase Two Cluster Study or Phase Two Cluster Re-Study, Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Phase Two Cluster Study or Phase Two Cluster Re-Study, as applicable.

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

- 10.0 Miscellaneous. The Phase Two Cluster Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, that are consistent with regional practices, Applicable Laws and Regulations and

the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA.

**Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(INTERCONNECTION CUSTOMER NAME) UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
(Print/Type)

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

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

**Attachment A To Appendix 3  
Phase Two Cluster Study Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE PHASE TWO  
CLUSTER STUDY**

The Phase Two Cluster Study will be based upon the results of the Phase One Cluster Study or Phase One Cluster Re-Study, as applicable, subject to any modifications in accordance with Section 4.4 of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

[Above assumptions to be completed by Transmission Provider]

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

**THIS AGREEMENT** is made and entered into by and between \_\_\_\_\_, ("Interconnection Customer,") and the U.S. Department of Energy, acting by and through the Bonneville Power Administration, ("Transmission Provider "). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

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

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

Transmission Provider has completed a Phase Two Cluster Study or Phase Two Cluster Re-Study and provided the results of said study to Interconnection Customer; and

Interconnection Customer has requested Transmission Provider to perform an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Phase Two Cluster Study or Phase Two Cluster Re-Study in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the Transmission System.

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause an Interconnection Facilities Study consistent with Section 8 of this LGIP to be performed in accordance with the Tariff.
- 3.0 Interconnection Customer has submitted to Transmission Provider a Commercial Readiness Milestone Option, in accordance with Section 7.5.1 of the LGIP.
- 4.0 Interconnection Customer has submitted to Transmission Provider technical data in accordance with Section 7.5.2 of the LGIP.
- 5.0 Interconnection Customer has submitted to Transmission Provider a re-demonstration of Site Control in accordance with Section 7.5.3 of the LGIP.

- 6.0 The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in the data provided in Attachment A to this Agreement.
- 7.0 The Interconnection Facilities Study report (i) shall provide a description, estimated cost of, schedule for required facilities to interconnect the Large Generating Facility to the Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Phase Two Cluster Study or Phase Two Cluster Re-Study.
- 8.0 Interconnection Customer shall pay the actual costs of the Interconnection Facilities Study in accordance with Section 8.1 of the LGIP.
- 9.0 The Interconnection Facilities Study is estimated to take [insert project schedule/duration] following execution of this Interconnection Facilities Study Agreement. Transmission Provider reserves the right to modify the project schedule by providing written notice to Interconnection Customer of the schedule change. Transmission Provider shall use Reasonable Efforts to complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study report to Interconnection Customer within the good faith estimated schedule provided herein in the Interconnection Facilities Study Agreement.
- 10.0 Miscellaneous. The Interconnection Facility Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA.

**Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.



(INTERCONNECTION CUSTOMER NAME)

UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
*(Print/Type)*

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

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

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

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

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

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

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

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

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

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

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

---

What protocol does the control system or PLC use?

---

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

Physical dimensions of the proposed interconnection station:

---

Bus length from generation to interconnection station:

---

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

---

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

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

---

\* To be completed in coordination with Transmission Provider.

Is the Large Generating Facility in Transmission Provider's service area?

\_\_\_\_ Yes      \_\_\_\_ No      Local provider: \_\_\_\_\_

Please provide proposed schedule dates:

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

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

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

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

**Appendix 5 to the Standard Large  
Generator Interconnection Procedures**

**STANDARD LARGE GENERATOR  
INTERCONNECTION AGREEMENT (LGIA)**

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## STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT

THIS STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT ("LGIA") is made and entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_ , by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Large Generating Facility), and The UNITED STATES OF AMERICA, Department of Energy, acting by and through the Bonneville Power Administration, ("Transmission Provider and/or Transmission Owner"). Interconnection Customer and Transmission Provider each may be referred to as a "Party" or collectively as the "Parties."

### RECITALS

Transmission Provider operates the Transmission System; and

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 LGIA.

Interconnection Customer and Transmission Provider have agreed to enter into this LGIA for the purpose of interconnecting the Large Generating Facility with the Transmission System.

In consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this 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 or the Open Access Transmission Tariff (Tariff).

**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 Transmission Provider's Transmission System that may be affected by the proposed interconnection.

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

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

**Ancillary Services** shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of 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 Standards** shall mean the requirements and guidelines of the Electric Reliability Organization and the Balancing Authority Area of the Transmission System to which the Generating Facility is directly interconnected.

**Balancing Authority (BA)** shall mean the responsible entity that integrates resource plans ahead of time, maintains load-Interchange-generation balance within a Balancing Authority Area, and supports interconnection frequency in real time.

**Balancing Authority Area (BAA)** shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area. For purposes of this Tariff, "BAA" shall have the same meaning as "Control Area."

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

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Standard Large Generator Interconnection Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Standard Large Generator Interconnection Agreement.

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

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

**Cluster** shall mean a group of one or more Interconnection Requests that are studied together for the purpose of conducting a Cluster Study.

**Cluster Re-Study** shall mean a re-study of a Cluster Study conducted pursuant to Sections 6.7 and 7.6 of the Standard Large Generator Interconnection Procedures.

**Cluster Scoping Meeting** shall mean the meeting between representatives of Interconnection Customer and Transmission Provider conducted for the purpose of discussing general information regarding the applicable Cluster Study, including size (e.g., MW and number of Interconnection Requests in the Cluster), a general overview of the Cluster Study process, and to exchange information, including transmission data and earlier study and Cluster Study evaluations, that would be reasonably expected to affect the applicable Cluster Study.

**Cluster Study** shall mean the evaluation of a Cluster in the Phase One Cluster Study or Phase Two Cluster Study, including any Cluster Re-Study, as described in more detail in Sections 6 and 7 of the LGIP.

**Clustering** shall mean the process whereby one or more Interconnection Requests are studied together, instead of serially, as described in more detail in Sections 6 and 7 of the LGIP.

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

**Commercial Operation Date** of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the Standard Large Generator Interconnection Agreement.

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

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

**Control Area** shall mean an electrical power system or combination of electric power systems to which a common automatic generation control scheme is applied in order to:

1. match, at all times, the power output of the generators within the electric power system(s) and capacity and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);

2. maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;
3. maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and
4. provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Standard Large Generator Interconnection Agreement.

**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 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 Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the transmission service necessary to effect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the Standard Large Generator Interconnection Agreement becomes effective upon execution by the Parties.

**Electric Reliability Organization** shall mean the North American Electric Reliability Corporation (NERC) or its successor organization.

**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 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 Standard Large Generator Interconnection Agreement to possess black start capability.

**Energy Resource Interconnection Service** shall mean an Interconnection Service that allows Interconnection Customer to connect its Generating Facility to Transmission Provider's

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

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes 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 (Commission) 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, pandemic or endemic, 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 devices for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include Interconnection Customer's Interconnection Facilities.

**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.

**Generating Facility Replacement Request** shall mean an Interconnection Customer's request, in accordance with the Tariff, to replace of one or more aged generating units, at an existing Generating Facility interconnected with Transmission Provider's Transmission System.

**Generating Facility Repower Request** shall mean an Interconnection Customer's request, in accordance with the Tariff, to replace one or more aged components of a generating unit, at an existing Generating Facility interconnected with Transmission Provider's Transmission System.

**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 Interconnection Customer reasonably expects it will be ready to begin use of Transmission Provider's Interconnection Facilities to obtain back feed power.

**Interconnection Customer** shall mean any entity, including Transmission Provider, Transmission Owner or any of the Affiliates or subsidiaries of either, that proposes to interconnect its Generating Facility with Transmission Provider's Transmission System.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Standard Large Generator Interconnection Agreement, 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 Transmission Provider's Interconnection Facilities and 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 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 Transmission Provider or a third party consultant for Interconnection Customer to determine a list of facilities (including Transmission Provider's Interconnection Facilities and Network Upgrades as identified in the Phase Two Cluster Study), the cost of those facilities, and the time required to interconnect the Generating Facility with Transmission Provider's Transmission System. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the LGIP, in accordance with the Tariff, 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 Transmission Provider's Transmission System.

**Interconnection Service** shall mean the service provided by Transmission Provider associated with interconnecting Interconnection Customer's Generating Facility to 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 Standard Large Generator Interconnection Agreement and, if applicable, Transmission Provider's Tariff.

**Interconnection Study** shall mean any of the following studies: the Phase One Cluster Study, the Phase Two Cluster Study and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures.

**Joint Operating Committee** shall be a group made up of representatives from Interconnection Customers and Transmission Provider to coordinate operating and technical considerations of Interconnection Service.

**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 Standard Large Generator Interconnection Agreement 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 an equal or later Queue Position.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Standard Large Generator Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data

acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**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 Interconnection Customer to integrate its Large Generating Facility with Transmission Provider's Transmission System: (1) in a manner comparable to that in which 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 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 Transmission Provider's Transmission System required at or beyond the point at which the Interconnection Facilities connect to Transmission Provider's Transmission System to accommodate the interconnection of the Large Generating Facility to 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 Standard Large Generator Interconnection Agreement or its performance.

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

**Phase One Cluster Study** shall mean a Cluster Study, including any Cluster Re-study, as described in Section 6 of the LGIP.

**Phase Two Cluster Study** shall mean a Cluster Study, including any Cluster Re-study, as described in Section 7 of the LGIP.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where Interconnection Customer's Interconnection Facilities connect to Transmission Provider's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to Transmission Provider's Transmission System.

**Provisional Interconnection Service** shall mean Interconnection Service provided by Transmission Provider associated with interconnecting Interconnection Customer's Generating Facility to Transmission Provider's Transmission System and enabling that Transmission System to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Provisional Large Generator Interconnection Agreement and, if applicable, the Tariff.

**Provisional Large Generator Interconnection Agreement** shall mean the interconnection agreement for Provisional Interconnection Service established between Transmission Provider and/or the Transmission Owner and Interconnection Customer. This agreement shall take the form of the Standard Large Generator Interconnection Agreement, modified for provisional purposes.

**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 Transmission Provider.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Large Generator Interconnection Agreement, 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.

**Site Control** shall mean the exclusive land right to develop, construct, operate, and maintain the Generating Facility over the term of expected operation of the Generating Facility. Site Control may be demonstrated by documentation establishing: (1) ownership of, a leasehold interest in, or a right to develop a site of sufficient size to construct and operate the Generating Facility; (2) an option to purchase or acquire a leasehold interest in a site of sufficient size to construct and operate the Generating Facility; or (3) documentation that clearly demonstrates the right of the Interconnection Customer to exclusively occupy a site of sufficient size to construct and operate the Generating Facility. Site Control for any Co-Located Resource is demonstrated by a contract or other agreement that allows for shared land use for all Co-Located Resources that meet the provisions of this Site Control definition.

**Small Generating Facility** shall mean a Generating Facility that has a Generating Facility Capacity of no more than 20 MW.

**Stand Alone Network Upgrades** shall mean Network Upgrades that are not part of an Affected System that Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Both Transmission Provider and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement. If Transmission Provider and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, Transmission Provider must provide Interconnection Customer a written technical explanation outlining why Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within fifteen (15) Business Days of its determination.

**Standard Large Generator Interconnection Agreement (LGIA)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in Transmission Provider's Tariff.

**Standard Large Generator Interconnection Procedures (LGIP)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are included in Transmission Provider's Tariff.

**Surplus Interconnection Customer** shall mean an entity that proposes to utilize or transfer Surplus Interconnection Service in accordance with Section 3.3 of the LGIP.

**Surplus Interconnection Service** shall mean any unneeded portion of Interconnection Service established in a Standard Large Generator Interconnection Agreement, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the Point of Interconnection would remain the same.

**Surplus Interconnection Service Request** shall mean a Surplus Interconnection Customer's request, in accordance with Section 3.3 of the LGIP, to utilize or transfer Surplus Interconnection Service at an existing Point of Interconnection.

**Surplus Scoping Meeting** shall mean the meeting between representatives of the Surplus Interconnection Customer and Transmission Provider conducted for the purpose of discussing the Surplus Interconnection Service Request and exchanging information.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) 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 Transmission Provider's Transmission System or on other delivery systems or other generating systems to which Transmission Provider's Transmission System is directly connected.

**Tariff** shall mean Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as amended or supplemented from time to time, or any successor tariff.

**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 Standard Large Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** shall mean the public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from Transmission Provider.

**Transmission Provider's Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by Transmission Provider from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Standard Large Generator Interconnection Agreement, 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 Transmission Provider or Transmission Owner that are used to provide transmission service under the Tariff.

**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.

**Variable Energy Resource** shall mean a device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator.

**Withdrawal Charge** shall mean the charge assessed by Transmission Provider to an Interconnection Customer that chooses to withdraw or is deemed withdrawn from Transmission Provider's interconnection queue or whose Generating Facility does not otherwise reach Commercial Operation. The calculation of the Withdrawal Charge is set forth in Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

**Article 2. Effective Date, Term and Termination****2.1 Effective Date.**

This LGIA shall become effective upon execution by the Parties.

**2.2 Term of Agreement.**

Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of ten (10) years from the Effective Date or such other longer period as Interconnection Customer may request (Term to be specified in individual agreements) and shall be automatically renewed for each successive one-year period thereafter.

**2.3 Termination Procedures.****2.3.1 Written Notice.**

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

**2.3.2 Default.**

Either Party may terminate this 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.

**2.4 Termination Costs.**

If a Party elects to terminate this Agreement pursuant to Article 2.3 above, each Party shall pay all costs incurred (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, for which it is responsible under this 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.

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

Transmission Provider shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by Transmission Provider to cancel any pending orders of or return such materials, equipment, or contracts.

If an Interconnection Customer terminates this 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 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 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 LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.

## **2.6 Survival.**

This 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 LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Party pursuant to this 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 LGIA (and any amendment hereto) with the appropriate Governmental Authority, if required. Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If Interconnection Customer has executed this 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.

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

##### **4.1 Interconnection Product Options.**

Interconnection Customer has selected the following (checked) type of Interconnection Service:

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

###### **4.1.1.1 The Product.**

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

###### **4.1.1.2 Transmission Delivery Service Implications.**

Under Energy Resource Interconnection Service, Interconnection Customer will be eligible to inject power from the Large Generating Facility into and deliver power across the interconnecting Transmission Provider's Transmission System on an "as available" basis up to the amount of MWs identified in the applicable stability and steady state studies to the extent the upgrades initially required to qualify for Energy Resource Interconnection Service have been constructed. Where eligible to do so (e.g., PJM, ISO-NE, NYISO), Interconnection Customer may place a bid to sell into the market up to the maximum identified Large Generating Facility output, subject to any conditions specified in the interconnection service approval, and the Large Generating Facility will be dispatched to the extent Interconnection Customer's bid clears. In all other instances, no transmission delivery service from the Large Generating Facility is assured, but Interconnection Customer may obtain Point-to-Point Transmission Service, Network Integration Transmission Service, or be used for secondary network transmission service, pursuant to Transmission Provider's Tariff, up to the maximum output identified in the stability and steady state studies. In those instances, in order for Interconnection Customer to obtain the right to deliver or inject energy beyond the Large Generating Facility Point of Interconnection or to improve its ability to do so, transmission delivery service must be obtained pursuant to the provisions of Transmission Provider's Tariff. Interconnection Customer's ability to inject its Large Generating Facility output beyond the Point of Interconnection, therefore, will

depend on the existing capacity of Transmission Provider's Transmission System at such time as a transmission service request is made that would accommodate such delivery. The provision of firm Point-to-Point Transmission Service or Network Integration Transmission Service may require the construction of additional Network Upgrades.

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

##### **4.1.2.1 The Product.**

Transmission Provider must conduct the necessary studies and construct the Network Upgrades needed to integrate the Large Generating Facility (1) in a manner comparable to that in which Transmission Provider integrates its generating facilities to serve native load customers; or (2) in an ISO or RTO with market based congestion management, in the same manner as all Network Resources. To the extent Interconnection Customer wants to receive Network Resource Interconnection Service, Transmission Provider shall construct the facilities identified in Appendix A to this LGIA

##### **4.1.2.2 Transmission Delivery Service Implications.**

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

construction of additional upgrades. Because such studies and upgrades would be associated with a request for delivery service under the Tariff, cost responsibility for the studies and upgrades would be in accordance with Transmission Provider's Tariff.

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.

There is no requirement either at the time of study or interconnection, or at any point in the future, that Interconnection Customer's Large Generating Facility be designated as a Network Resource by a Network Service Customer under the Tariff or that Interconnection Customer identify a specific buyer (or sink). To the extent a Network Customer does designate the Large Generating Facility as a Network Resource, it must do so pursuant to Transmission Provider's Tariff.

Once an Interconnection Customer satisfies the requirements for obtaining Network Resource Interconnection Service, any future transmission service request for delivery from the Large Generating Facility within Transmission Provider's Transmission System of any amount of capacity and/or energy, up to the amount initially studied, will not require that any additional studies be performed or that any further upgrades associated with such Large Generating Facility be undertaken, regardless of whether or not such Large Generating Facility is ever designated by a Network Customer as a Network Resource and regardless of changes in ownership of the Large Generating Facility. However, the reduction or elimination of congestion or redispatch costs may require additional studies and the construction of additional upgrades.

To the extent Interconnection Customer enters into an arrangement for long term transmission service for deliveries from the Large Generating Facility outside Transmission Provider's Transmission System, such request may require additional studies and upgrades in order for Transmission Provider to grant such request.

#### **4.2 Provision of Service.**

Transmission Provider shall provide 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 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 LGIA for its compliance therewith.

**4.4 No Transmission Delivery Service.**

The execution of this LGIA does not constitute a request for, nor the provision of, any transmission delivery service under Transmission Provider's Tariff, and does not convey any right to deliver electricity to any specific customer or point of delivery.

**4.5 Interconnection Customer Provided Services.**

The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.5.1. 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 the Standard Option or Alternate Option set forth below, and such dates and selected option shall be set forth in Appendix B, Milestones. At the same time, Interconnection Customer shall indicate whether it elects to exercise the Option to Build set forth in Article 5.1.3 below. 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. Upon receipt of the notification that Interconnection Customer's designated dates are not acceptable to Transmission Provider, Interconnection Customer shall notify Transmission Provider within thirty (30) Calendar Days whether it elects to exercise the Option to Build if it has not already elected to exercise the Option to Build.

**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.**

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 the dates designated by Interconnection Customer are not acceptable to Transmission Provider, 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 all facilities other than Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades if Interconnection Customer elects to exercise the Option to Build under Article 5.1.3). If the Parties are unable to reach agreement on such terms and conditions, then pursuant to Article 5.1.1 (Standard Option), Transmission Provider shall assume responsibility for the design, procurement and construction of all facilities other than Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades if Interconnection Customer elects to exercise the Option to Build.

**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,

- 5.2.1** 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;
- 5.2.2** 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 to which Transmission Provider would be subject in the engineering, procurement or construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;
- 5.2.3** 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;
- 5.2.4** 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;
- 5.2.5** 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;
- 5.2.6** 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, Interconnection Customer shall be obligated to remedy deficiencies in that portion of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;
- 5.2.7** (Intentionally Omitted);
- 5.2.8** Interconnection Customer shall transfer control of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Provider;
- 5.2.9** unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Provider;

**5.2.10** 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

**5.2.11** 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.

**5.2.12** If Interconnection Customer exercises the Option to Build pursuant to Article 5.1.3, Interconnection Customer shall pay Transmission Provider the agreed upon amount of [PLACEHOLDER] for Transmission Provider to execute the responsibilities enumerated to Transmission Provider under Article 5.2. Transmission Provider shall invoice Interconnection Customer according to the schedule provided in Appendix B.

### **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 Subparagraphs 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 one-half 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 twenty (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 LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for Transmission Provider's failure to meet its schedule.

No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for the Large Generating Facility's Trial Operation or to export power from the Large Generating Facility on the

specified dates, unless Interconnection Customer would have been able to commence use of Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for Large Generating Facility's Trial Operation or to export power from the Large Generating Facility, but for Transmission Provider's delay; (2) Transmission Provider's failure to meet the specified dates is the result of the action or inaction of Interconnection Customer or any other Interconnection Customer who has entered into an LGIA with Transmission Provider or any cause beyond Transmission Provider's reasonable control or reasonable ability to cure; (3) 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.**

Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with the guidelines and procedures established by the Electric Reliability Organization. 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 Interconnection Facilities Study pursuant to the Interconnection 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 Other Interconnection Options.

### 5.9.1 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 LGIA. Transmission Provider shall permit Interconnection Customer to operate the Large Generating Facility and Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

### 5.9.2 Provisional Interconnection Service.

Upon the request of Interconnection Customer, and prior to completion of requisite Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities and after completion of the NEPA process and a

decision to approve the project Transmission Provider may execute a Provisional Large Generator Interconnection Agreement. Transmission Provider shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if Interconnection Customer interconnects without modifications to the Generating Facility or Transmission system. Transmission Provider shall determine whether any Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities that are necessary to meet the requirements of Electric Reliability Organization, or any applicable Regional Entity for the interconnection of a new, modified and/or expanded Generating Facility are in place prior to the commencement of Interconnection Service from the Generating Facility. Where available studies indicate that such, Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities that are required for the interconnection of a new, modified and/or expanded Generating Facility are not currently in place, Transmission Provider will perform a study, at Interconnection Customer's expense, to confirm the facilities that are required for Provisional Interconnection Service. The maximum permissible output of the Generating Facility in the Provisional Large Generator Interconnection Agreement shall be studied and updated on an annual basis and at Interconnection Customer's expense. Interconnection Customer assumes all risk and liabilities with respect to changes between the Provisional Large Generator Interconnection Agreement and the Large Generator Interconnection Agreement, including changes in output limits and Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities cost responsibilities.

**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. 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 following "as-built" drawings, information and documents for Transmission Provider's Interconnection Facilities: drawings, diagrams, and other information reasonably related to the specifications set forth in Appendix A.

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 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 federal 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 shall cooperate with each other in good faith in obtaining all permits, licenses, and authorizations that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, Transmission Provider or Transmission Owner shall provide permitting assistance to Interconnection Customer comparable to that provided to Transmission Provider's own, or an Affiliate's generation.

**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 Interconnection 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 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 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 LGIA pursuant to this Article 5.16, and has not requested Transmission Provider to recommence the work required under this LGIA on or before the expiration of three (3) years following commencement of such suspension, this 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 (Intentionally Omitted).**

**5.18 Tax Status.**

Transmission Provider shall cooperate with Interconnection Customer to maintain Interconnection Customer's tax status. Nothing in this 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 LGIA 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 Tariff. 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 at its own expense 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.

**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 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 LGIA.

**Article 7. Metering****7.1 General.**

Each Party shall comply with the Electric Reliability Organization requirements. 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 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 LGIA, except as provided in Article 7.4 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.

**7.3 Standards.**

Transmission Provider shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable ANSI standards.

**7.4 Testing of Metering Equipment.**

Transmission Provider shall 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.

#### **7.5 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.

#### **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 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.

### **8.4 Provision of Data from a Variable Energy Resource.**

Interconnection Customer whose Generating Facility contains at least one Variable Energy Resource shall provide meteorological and forced outage data to Transmission Provider to the extent necessary for Transmission Provider's development and deployment of power production forecasts for that class of Variable Energy Resources. Interconnection Customer with a Variable Energy Resource having wind as the energy source, at a minimum, will be required to provide Transmission Provider with site-specific meteorological data including: temperature, wind speed, wind direction, and atmospheric pressure. Interconnection Customer with a Variable Energy Resource having solar as the energy source, at a minimum, will be required to provide Transmission Provider with site-specific meteorological data including: temperature, atmospheric pressure, and irradiance. Transmission Provider and Interconnection Customer whose Generating Facility contains a Variable Energy Resource shall mutually agree to any additional meteorological data that are required for the development and deployment of a power production forecast. Interconnection Customer whose Generating Facility contains a Variable Energy Resource also shall submit data to Transmission Provider regarding all forced outages to the extent necessary for Transmission Provider's development and deployment of power production forecasts for that class of Variable Energy Resources. The exact specifications of the meteorological and forced outage data to be provided by Interconnection Customer to Transmission Provider, including the frequency and timing of data submittals, shall be made taking into account the size and configuration of the Variable Energy Resource, its characteristics, location, and its importance in maintaining generation resource adequacy and transmission system reliability in its area. All requirements for meteorological and forced outage data must be commensurate with the power production forecasting employed by Transmission Provider. Such requirements for meteorological and forced outage data are set forth in Appendix C, Interconnection Details, of this LGIA, as they may change from time to time.

**Article 9. Operations****9.1 General.**

Each Party shall comply with the Electric Reliability Organization 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 Balancing Authority Area Notification.**

At least three months before Initial Synchronization Date, Interconnection Customer shall notify Transmission Provider in writing of the Balancing Authority Area in which the Large Generating Facility will be located. If Interconnection Customer elects to locate the Large Generating Facility in a Balancing Authority Area other than the Balancing Authority Area in which the Large Generating Facility is physically located, and if permitted to do so by the relevant transmission tariffs, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Balancing Authority Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Balancing Authority Area.

**9.3 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 LGIA. Transmission Provider may provide operating instructions to Interconnection Customer consistent with this 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.

**9.4 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 LGIA. Interconnection Customer shall operate the Large Generating Facility and Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of the Balancing Authority Area of which it is part, as such requirements are set forth in Appendix C, Interconnection Details, of this 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 LGIA.

**9.5 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.

## **9.6 Reactive Power and Primary Frequency Response.**

### **9.6.1 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 Balancing Authority Area on a comparable basis.

### **9.6.2 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 Balancing Authority 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 the System Operator.

#### **9.6.2.1 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 Balancing Authority Area on a comparable basis.

### **9.6.3 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.

### **9.6.4 Primary Frequency Response.**

Interconnection Customer shall ensure the primary frequency response capability of its Large Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term “functioning governor or equivalent controls” as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Large Generating Facility’s real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved Electric Reliability Organization reliability standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Large Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved Electric Reliability Organization reliability standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Large Generating Facility’s real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Large Generating Facility’s real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved Electric Reliability Organization reliability standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Large Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Large Generating Facility with the Transmission System, Interconnection Customer shall operate the Large Generating Facility consistent

with the provisions specified in Articles 9.6.4.1 and 9.6.4.2 of this Agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Large Generating Facilities.

**9.6.4.1 Governor or Equivalent Controls.**

Whenever the Large Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Large Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall:

- (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or
- (2) implement the relevant droop and deadband settings from an approved Electric Reliability Organization reliability standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Large Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Large Generating Facility's governor or equivalent controls to a minimum whenever the Large Generating Facility is operated in parallel with the Transmission System.

**9.6.4.2 Timely and Sustained Response.**

Interconnection Customer shall ensure that the Large Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Large Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Large

Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved reliability standard with equivalent or more stringent requirements shall supersede the above requirements.

#### **9.6.4.3 Exemptions.**

Large Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from Articles 9.6.4, 9.6.4.1, and 9.6.4.2 of this Agreement. Large Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Article 9.6.4, but shall be otherwise exempt from the operating requirements in Articles 9.6.4, 9.6.4.1, 9.6.4.2, and 9.6.4.4 of this Agreement.

#### **9.6.4.4 Electric Storage Resources.**

Interconnection Customer interconnecting a Generating Facility that contains an electric storage resource shall establish an operating range in Appendix C of its LGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Articles 9.6.4, 9.6.4.1, 9.6.4.2 and 9.6.4.3 of this Agreement. Appendix C shall specify whether the operating range is static or dynamic, and shall consider (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Appendix C must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Article 9.6.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive

electricity from the Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

## **9.7 Outages and Interruptions.**

### **9.7.1 Outages.**

#### **9.7.1.1 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.

#### **9.7.1.2 Outage Schedules.**

Transmission Provider shall post scheduled outages of its transmission facilities on the 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.

**9.7.1.3 Outage Restoration.**

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

**9.7.2 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:

- 9.7.2.1** The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;
- 9.7.2.2** 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;
- 9.7.2.3** 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.

**9.7.3 Under-Frequency and Over-Frequency Conditions.**

The Transmission System is designed to automatically activate a load-shed program as required by the Electric Reliability Organization 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 Electric Reliability Organization to ensure "ride through" capability of the Transmission System. Large Generating Facility



response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with Transmission Provider in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a 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.

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

##### **9.7.4.1 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.

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

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

**9.7.4.4** 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.

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

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

#### **9.7.5 Requirements for Protection.**

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

#### **9.7.6 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.

#### **9.8 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.

#### **9.9 Use of Interconnection Facilities by Third Parties.**

##### **9.9.1 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.

##### **9.9.2 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 FERC for resolution.

#### **9.10 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 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 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 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.**

Transmission Provider or Transmission Owner shall design, procure, construct, install, own and/or control Transmission Provider's Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at the sole expense of 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. 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 Transmission Credits.****11.4.1 Repayment of Amounts Advanced for Network Upgrades.**

Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to Transmission Provider and Affected System Operator, if any, for the Network Upgrades, to be paid to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Large Generating Facility. Any repayment shall include interest calculated at the rate for ten-year bonds posted on Bloomberg, L.P., under the United States Government Agency fair market yield curve (yield curve number 84) as in effect on the first day of the month during which Transmission Provider receives the first payment for Network Upgrades, such interest to accrue from the date of any payment for Network Upgrades through the date on which

Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. Interconnection Customer may assign such repayment rights to any person.

Notwithstanding the foregoing, Interconnection Customer, Transmission Provider, and Affected System Operator may adopt any alternative payment schedule that is mutually agreeable so long as Transmission Provider and Affected System Operator take one of the following actions no later than five years from the Commercial Operation Date: (1) return to Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that Transmission Provider or Affected System Operator will continue to provide payments to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the Commercial Operation Date.

If the Large Generating Facility fails to achieve commercial operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, Transmission Provider and Affected System Operator shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying the entity to which reimbursement must be made.

#### **11.4.2 Special Provisions for Affected Systems.**

Unless Transmission Provider provides, under the LGIA, for the repayment of amounts advanced to Affected System Operator for Network Upgrades, Interconnection Customer and Affected System Operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by Interconnection Customer to the Affected System Operator as well as the repayment by the Affected System Operator.

#### **11.4.3** Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that Interconnection Customer, shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Large Generating Facility.

**11.5 Provision of Security.**

At least thirty (30) Calendar Days prior to the commencement of the 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. Such security for payment shall be in an amount sufficient to cover the costs for constructing, 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 9.6.3 (Payment for Reactive Power) or 13.5.1 of this 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 Interconnection Customer is required to provide or absorb any Reactive Power under this LGIA, Transmission Provider agrees to compensate Interconnection Customer in such amount as would have been due Interconnection Customer had the rate schedule been in effect at the time service commenced; provided, however, that such rate schedule must be filed at FERC or other appropriate Governmental Authority within sixty (60) Calendar Days of the commencement of service.

**11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition.**

Transmission Provider or RTO or ISO shall compensate Interconnection Customer for its provision of real and reactive power and other Emergency Condition services that Interconnection Customer provides to support the

Transmission System during an Emergency Condition in accordance with Article 11.6.

## **Article 12. Invoice**

### **12.1 General.**

Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this 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, Addresses for Delivery of Notices and Billings. 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 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 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 Definition.**

"Emergency Condition" shall mean a condition or situation: (i) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (ii) that, in the case of 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 the Transmission System, Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the Transmission System is directly connected; or (iii) 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 Large 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 this LGIA to possess black start capability.

**13.2 Obligations.**

Each Party shall comply with the Emergency Condition procedures of the applicable ISO/RTO, the Electric Reliability Organization, Applicable Laws and Regulations, and any emergency procedures agreed to by the Joint Operating Committee.

**13.3 Notice.**

Transmission Provider shall notify Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects Transmission Provider's Interconnection Facilities or the Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Large Generating Facility or Interconnection Customer's Interconnection Facilities. Interconnection Customer shall notify Transmission Provider promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the Transmission System or Transmission Provider's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of Interconnection Customer's or Transmission Provider's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken.

**13.4 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.



## **13.5 Transmission Provider Authority.**

### **13.5.1 General.**

Transmission Provider may take whatever actions or inactions with regard to the Transmission System or Transmission Provider's Interconnection Facilities it deems necessary during an Emergency Condition in order to: (i) preserve public health and safety, (ii) preserve the reliability of the Transmission System or Transmission Provider's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

Transmission Provider shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or Interconnection Customer's Interconnection Facilities. Transmission Provider may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.5.2; directing Interconnection Customer to assist with black start (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.

### **13.5.2 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 Tariff. 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.

**13.6 Interconnection Customer Authority.**

Consistent with Good Utility Practice and the LGIA and the LGIP, Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Transmission System and Transmission Provider's Interconnection Facilities. Transmission Provider shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.7 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 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. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this 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 LGIA and each of its provisions shall be governed by federal law.

**14.2.2** This 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 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

delivered in person, in writing, by email, facsimile, or First Class mail or overnight delivery service at the address set out in Appendix F, Addresses for Delivery of Notices and Billings. Notices are effective on the date received.

Either Party may change the notice information in this 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, Addresses for delivery of Notices and Billings.

### **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 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, Addresses for delivery of Notices and Billings.

For any service interruptions, Emergency Conditions, operating instructions, curtailments, or dispatch orders, Transmission Provider may notify Interconnection Customer through any of the following methods: (1) by electronic signal pre-arranged between Interconnection Customer and Transmission Provider, (2) by telephone, facsimile or email to the telephone numbers and email addresses set out in Appendix F, Addresses for delivery of Notices and Billings, (3) by a change request to a transaction submitted according to the NERC e-Tag protocol, or (4) as otherwise agreed between Interconnection Customer and Transmission Provider. Transmission Provider is not responsible for ensuring that Interconnection Customer has the continuous ability to receive Transmission Provider's electronic signals.

### **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 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 Default 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 Default 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 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 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 LGIA.

## **Article 18. Indemnity, Consequential Damages, and Insurance**

Article 18.1 applies only if, at the time of the action or inaction by a Party that gave rise to the Party's right to indemnification, either Transmission Provider or Interconnection Customer was not a party to the Agreement Limiting Liability among Western Interconnected Electric Systems.

### **18.1 Indemnity.**

The Parties shall at all times indemnify 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 inaction of its obligations under this 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. (Intentionally Omitted)**

**18.1.2 Indemnified 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.

**18.2 Consequential Damages.**

Other than the Liquidated Damages heretofore described, in no event shall either Party be liable under any provision of this 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.**

Interconnection Customer shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by Transmission Provider, the following minimum insurance coverage, 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 Transmission Provider, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees (Transmission Provider 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 LGIA against Transmission Provider Party Group and provide thirty (30) Calendar Days advance written notice to Transmission Provider 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. Interconnection Customer 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 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 Interconnection Customer are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by Interconnection Customer under this LGIA.
- 18.3.9** Within ten (10) Business Days following execution of this 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) Calendar Days thereafter, Interconnection Customer shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10** Notwithstanding the foregoing, Interconnection Customer 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, Interconnection Customer has an issuer credit rating or a senior unsecured debt rating of investment grade or better as rated 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 Interconnection Customer has no issuer credit rating and its senior unsecured debt is unrated by Standard & Poor's, or Inter-connection Customer has an issuer credit rating or a senior unsecured debt rating of less than investment grade as rated by Standard & Poor's, Interconnection Customer shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that Interconnection Customer is permitted to self-insure pursuant to this article, it shall notify Transmission Provider 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 LGIA.

## **Article 19. Assignment**

### **19.1 Assignment.**

This LGIA may be assigned by either Party only with the written consent of the other; provided that either Party may assign this 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 LGIA; and provided further that Interconnection Customer shall have the right to assign this 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 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 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 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 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 (Intentionally Omitted).**

## **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 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.

#### **22.1.1 Term.**

During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this 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 LGIA; or (6) is required, in accordance with Article 22.1.7 of the LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, including the Freedom of Information Act, 5 U.S.C. § 552, as amended, or is necessary in any legal proceeding establishing rights and obligations under this 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 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 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 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 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 FERC, its Staff, or a State.**

Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 CFR § 1b.20, if FERC 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 LGIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this LGIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Party to the LGIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**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 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 LGIA or as a transmission service provider or a Balancing Authority 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 remediate all releases of Hazardous Substances brought to, or created at, real property it owns underlying the Large Generating Facility or Interconnection Facilities, and any Hazardous Substances migrating from real property it owns at the Large Generating Facility site. The Party that caused the release shall bear the costs of

the remediation, which shall meet applicable state and federal environmental standards at the time of the remediation. Such costs may include, but are not limited to, state and federal supervision, remedial action plans, removal and remedial actions, and negotiation of voluntary and judicial agreements required to meet such environmental standards.

- 23.2** Each Party shall notify the other Party as promptly as practicable of any significant release of Hazardous Substances by the first Party. Each Party shall cooperate with the other Party in accommodating any necessary remedial activities of the other Party with respect to property occupied by such other Party.
- 23.3** The Parties agree to comply fully with the substantive requirements of all applicable federal, state and local environmental laws in the performance of their obligations hereunder, and to mitigate and abate adverse environmental impacts accordingly.

#### **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 Cluster Study and Interconnection 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. Interconnection Customer shall not begin Trial Operation until such studies are completed.

#### **24.4 Information Supplementation.**

Prior to the 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. 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 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 LGIA; and (ii) carry out its obligations and responsibilities under

this 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 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 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 LGIA.

### **25.3 Audit Rights.**

Subject to the requirements of confidentiality under Article 22 of this 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 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 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 LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four months after the event for which the audit is sought.

**25.5 Audit Results.**

If an audit by a Party determines that an overpayment or an underpayment has occurred, a notice of such overpayment or underpayment shall be given to the other Party together with those records from the audit which support such determination.

**Article 26. Subcontractors****26.1 General.**

Nothing in this LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this 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 LGIA. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall Transmission Provider be liable for the actions or inactions of Interconnection Customer or its subcontractors with respect to obligations of Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this 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 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 LGIA.

**27.2 External Arbitration Procedures.**

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

**27.3 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 LGIA and shall have no power to modify or change any provision of this Agreement 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. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**27.4 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.**

Interconnection Customer 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 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 LGIA.

**28.1.2 Authority.**

Such Party has the right, power and authority to enter into this LGIA, to become a Party hereto and to perform its obligations hereunder. This 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 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 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 LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

**Article 29. Joint Operating Committee**

**29.1 Joint Operating Committee.**

Except in the case of ISOs and RTOs, Transmission Provider shall constitute a Joint Operating Committee to coordinate operating and technical considerations of Interconnection Service. At least six (6) months prior to the expected Initial Synchronization Date, Interconnection Customer and Transmission Provider shall each appoint one representative and one alternate to the Joint Operating Committee. Each Interconnection Customer shall notify Transmission Provider of its appointment in writing. Such appointments may be changed at any time by similar notice. The Joint Operating Committee shall meet as necessary, but not less than once each calendar year, to carry out the duties set forth herein. The Joint Operating Committee shall hold a meeting at the request of either Party, at a time and place agreed upon by the representatives. The Joint Operating Committee shall perform all of its duties consistent with the provisions of this LGIA. Each Party shall cooperate in providing to the Joint Operating Committee all information required in the performance of the Joint Operating Committee's duties. All decisions and agreements, if any, made by the Joint Operating

Committee, shall be evidenced in writing. The duties of the Joint Operating Committee shall include the following:

- 29.1.1** Establish data requirements and operating record requirements.
- 29.1.2** Review the requirements, standards and procedures for data acquisition equipment, protective equipment and any other equipment or software.
- 29.1.3** Annually review the one (1) year forecast of maintenance and planned outage schedules of Transmission Provider's and Interconnection Customer's facilities at the Point of Interconnection.
- 29.1.4** Coordinate the scheduling of maintenance and planned outages on the Interconnection Facilities, the Large Generating Facility and other facilities that impact the normal operation of the interconnection of the Large Generating Facility to the Transmission System.
- 29.1.5** Ensure that information is being provided by each Party regarding equipment availability.
- 29.1.6** Perform such other duties as may be conferred upon it by mutual agreement of the Parties.

## **Article 30. Miscellaneous**

### **30.1 Binding Effect.**

This 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.

### **30.2 Conflicts.**

In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.

### **30.3 Rules of Interpretation.**

This 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 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 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 LGIA or such Appendix to this LGIA, or

such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this 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".

#### **30.4 Entire Agreement.**

This 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 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 LGIA.

#### **30.5 No Third Party Beneficiaries.**

This 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.

#### **30.6 Waiver.**

The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this 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 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 LGIA. Termination or Default of this 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 LGIA shall, if requested, be provided in writing.

#### **30.7 Headings.**

The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.

#### **30.8 Multiple Counterparts.**

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

#### **30.9 Amendment.**

The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by the Parties.

**30.10 Modification by the Parties.**

The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights. (Intentionally Omitted)****30.12 No Partnership.**

This 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.

**30.13 Signatures.**

**Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(INTERCONNECTION CUSTOMER NAME)      UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
*(Print/Type)*

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

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

**APPENDIX A to LGIA**

**INTERCONNECTION FACILITIES, NETWORK UPGRADES AND DISTRIBUTION UPGRADES**

**1. Interconnection Facilities:**

(a) [insert Interconnection Customer's Interconnection Facilities]:

(b) [insert Transmission Provider's Interconnection Facilities]:

**2. Network Upgrades:**

(a) [insert Stand Alone Network Upgrades]:

(b) [insert Other Network Upgrades]:

**3. Distribution Upgrades:**

**4. Contingent Facilities:**

**Appendix B to LGIA**

**Milestones**

**Appendix C to LGIA**  
**Interconnection Details and**  
**Operating Requirements**



**Appendix D to LGIA****Security Arrangements****Details**

Infrastructure security of Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day Transmission System reliability and operational security. FERC will expect all Transmission Providers, market participants, and Interconnection Customers interconnected to the Transmission System to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

**Appendix E to LGIA  
Commercial Operation**

**Date**

This Appendix E is a part of the 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 LGIA**

**Addresses for Delivery of Notices and Billings**

**Notices:**

Transmission Provider:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**Billings and Payments:**

Transmission Provider:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

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

Transmission Provider:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**Appendix G to LGIA****INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT**

Appendix G sets forth requirements and provisions specific to a wind generating plant or a Generating Facility that contains a wind generating plant. All other requirements of this LGIA continue to apply to wind generating plant interconnections.

**A. Technical Standards Applicable to a Wind Generating Plant****i. Low Voltage Ride-Through (LVRT) Capability**

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The LVRT standard provides for a transition period standard and a post-transition period standard.

**Transition Period LVRT Standard**

The transition period standard applies to wind generating plants subject to FERC Order 661 that have either: (i) interconnection agreements signed and filed with the Commission, filed with the Commission in unexecuted form, or filed with the Commission as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generating turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

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 Transmission Provider. 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.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.
3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAR Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

**Post-transition Period LVRT Standard**

All wind generating plants subject to FERC Order No. 661 and not covered by the transition period described above 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 Transmission Provider. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles 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. A wind generating plant shall remain interconnected during such a fault on the transmission system for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static

VAr Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.

5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

**ii. Power Factor Design Criteria (Reactive Power)**

A wind generating plant shall maintain a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA, if Transmission Provider's Phase Two Cluster Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors if agreed to by Transmission Provider, or a combination of the two. 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 Phase Two Cluster Study shows this to be required for system safety or reliability.

**iii. Supervisory Control and Data Acquisition (SCADA) Capability**

The wind plant shall provide SCADA capability to transmit data and receive instructions from Transmission Provider to protect system reliability. 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.



**Appendix H to LGIA**

**Annual Operation and Maintenance Charge:**

**Monthly Operation and Maintenance Charge:<sup>3</sup>**

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<sup>3</sup> The monthly charge is one-twelfth of the annual charge.



**APPENDIX 6 to LGIP**  
**SURPLUS INTERCONNECTION SERVICE SYSTEM IMPACT STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into by and between \_\_\_\_\_, ("Surplus Interconnection Customer,") and the U.S. Department of Energy, acting by and through the Bonneville Power Administration, ("Transmission Provider "). Surplus Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

Surplus Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Surplus Interconnection Request submitted by Surplus Interconnection Customer on [Date], and entered into the Interconnection Queue as Request No. G0xxx; and

Surplus Interconnection Customer desires to interconnect the Large Generating Facility with an existing Generating Facility to use the Surplus Interconnection Service available from Large Generating Interconnection Agreement No. \_\_\_\_\_; and

Transmission Provider has decided to perform a Surplus Interconnection System Impact Study to assess the impact of interconnecting the Large Generating Facility to the Transmission System;

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's Large Generator Interconnection Procedures (LGIP).
- 2.0 Transmission Provider shall perform a Surplus Interconnection System Impact Study consistent with Section 3.3.10 of the LGIP.
- 3.0 The scope of the Surplus Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Surplus Interconnection System Impact Study will be based upon the results of the technical information provided by Surplus Interconnection Customer in the Surplus Interconnection Request, subject to any modifications in accordance with Section 4.4 of the LGIP. Transmission Provider reserves the right to request additional technical information from Surplus Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Surplus Interconnection Customer System Impact Study.

- 5.0 The Surplus Interconnection System Impact Study report shall provide the following information:
  - 5.1 identification of any equipment short circuit capability limits exceeded as a result of the interconnection;
  - 5.2 identification of any applicable thermal or voltage capability limits exceeded as a result from the interconnection;
  - 5.3 identification of any instability or inadequately damped response to system disturbances resulting from the interconnection; and
  - 5.4 description and non-binding, good faith estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit, instability, and power flow issues.
- 6.0 Surplus Interconnection Customer shall execute this Agreement and return it to Transmission Provider within thirty (30) Calendar Days after receipt; Surplus Interconnection Customer shall include a \$50,000 deposit for the performance of the Surplus Interconnection System Impact Study in accordance with Section 3.3.10 of the LGIP. Transmission Provider's good faith estimate for the time of completion of the Surplus Interconnection System Impact Study is (90) Calendar Days after Transmission Provider receives this executed Agreement from Surplus Interconnection Customer.
- 7.0 Miscellaneous. The Surplus Interconnection Service System Impact Study Agreement shall include standard miscellaneous terms including, but not limited to, representations, disclaimers, governing law, amendment, waiver, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA.

**Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(SURPLUS INTERCONNECTION CUSTOMER NAME) UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
*(Print/Type)*

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

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

**Attachment A to Appendix 6  
Surplus Interconnection  
Service System Impact  
Study Agreement**

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

The Surplus Interconnection System Impact Study will be based upon the results of the Scoping Meeting held between Transmission Provider and Surplus Interconnection Customer on [Date], subject to any modifications in accordance with Section 4.4 of the LGIP, and the following assumption:

Designation of Point of Interconnection and configuration to be studied:

**APPENDIX 7 to LGIP**  
**SURPLUS INTERCONNECTION SERVICE FACILITIES STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into by and between \_\_\_\_\_, ("Surplus Interconnection Customer,") and the U.S. Department of Energy, acting by and through the Bonneville Power Administration, ("Transmission Provider "). Surplus Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

Surplus Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Surplus Interconnection Request submitted by Surplus Interconnection Customer on [Date], and entered into the Interconnection Queue as Request No. G0xxx; and

Surplus Interconnection Customer desires to interconnect the Large Generating Facility with an existing Generating Facility to use the Surplus Interconnection Service available; and

*[Drafter's Note: Option 1 (If Surplus Interconnection System Impact Study was conducted)]* Transmission Provider has completed a Surplus Interconnection System Impact Study (Surplus System Impact Study) and provided the results of said study to Surplus Interconnection Customer; and

*[Drafter's Note: Option 2 (If Surplus System Impact Study was skipped)]* Transmission Provider has determined that an existing System Impact Study is sufficient to evaluate the request for Surplus Interconnection Service; and

*[Drafter's Note: Option 1 (If Surplus System Impact Study was conducted)]* Transmission Provider has decided to perform a Surplus Interconnection Service Facilities Study (Surplus Facilities Study) to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Surplus Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the Transmission System; and

*[Drafter's Note: Option 2 (If Surplus System Impact Study was skipped)]* Transmission Provider has decided to perform a Surplus Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Surplus System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the Transmission System;

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's Large Generator Interconnection Procedures (LGIP).
- 2.0 Transmission Provider shall perform the Surplus Facilities Study consistent with Section 3.3.11 of the LGIP.
- 3.0 Interconnection Customer shall complete Attachment A to this Agreement. The scope of the Surplus Facilities Study is subject to the assumptions and the data provided in Attachment A.
- 4.0 *[Drafter's Note: Option 1 (If Surplus System Impact Study was conducted)]*  
The Surplus Facilities Study report must provide a description, estimated cost and a schedule for required facilities to interconnect the Large Generating Facility to the Transmission System. The report must also address the short circuit, instability, and power flow issues identified in the Surplus Interconnection Service System Impact Study.
- 5.0 *[Drafter's Note: Option 2 (If Surplus System Impact Study was skipped)]*  
Surplus Interconnection Customer shall execute this Agreement and return it to Transmission Provider within thirty (30) Calendar Days after receipt; Surplus Interconnection Customer shall include a \$50,000 deposit for the performance of the Surplus Facilities Study in accordance with Section 3.3.11 of the LGIP. Transmission Provider's good faith estimate for completion of the Surplus Facilities Study is specified in this Agreement.
- 6.0 Transmission Provider shall use Reasonable Efforts to complete the Surplus Facilities Study and issue a draft Surplus Interconnection Facilities Study report to Surplus Interconnection Customer within one hundred eighty (180) Calendar Days after receipt of an executed copy of this Surplus Interconnection Facilities Study Agreement.
- 7.0 Miscellaneous. The Surplus Interconnection Service Facilities Study shall include standard miscellaneous terms including, but not limited to, representations, disclaimers, governing law, amendment, waiver, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA.



**Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(SURPLUS INTERCONNECTION CUSTOMER NAME) UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
*(Print/Type)*

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

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

**Attachment A to Appendix 7  
Surplus Interconnection  
Service Facilities Study  
Agreement**

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

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

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

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

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

Will an alternate source of auxiliary power be available during CT/PT maintenance?

Yes                      No

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

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

\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_

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

Physical dimensions of the proposed surplus interconnection station:

\_\_\_\_\_



**APPENDIX 8**  
**INTERCONNECTION PROCEDURES FOR A WIND GENERATING PLANT**

Appendix G sets forth procedures specific to a wind generating plant. All other requirements of this LGIP continue to apply to wind generating plant interconnections.

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

The wind plant Interconnection Customer, in completing the Interconnection Request required by Section 3.4 of this LGIP, may provide to Transmission Provider a set of preliminary electrical design specifications depicting the wind plant as a single equivalent generator. Upon satisfying these and other applicable Interconnection Request conditions, the wind plant may enter the queue and receive the base case data as provided for in this LGIP.

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

## ATTACHMENT M

### Basic Credit Standards

For the purpose of determining the ability of the Transmission Customer to meet its obligations related to service received under this Tariff, the Transmission Provider may require reasonable credit review procedures. This review shall be made in accordance with standard commercial practices using quantitative and qualitative criteria to determine the level of secured and unsecured credit. The basic credit standards set forth below are supplemented by detailed creditworthiness standards and practices that are provided on the Transmission Provider's OASIS site.

#### Summary of Credit Review Procedures

The creditworthiness of the Transmission Customer or potential Transmission Customer, also referred to as Transmission counterparty, must be determined through a fundamental analysis of the Transmission Customer's financial and operational condition prior to receiving service under this Tariff. Both quantitative and qualitative criteria will be evaluated in the comprehensive credit review process. Examples of the criteria used in the credit review process include but are not limited to the following:

#### Quantitative Criteria

- a) Financial ratios (capitalization metrics, return on equity and asset metrics, operating and net margin metrics, tangible net worth metrics, debt and interest coverage metrics, cash flow metrics, purchased power expense metrics, etc.);
- b) Financial trends (year to year, quarter to quarter, etc.);
- c) Bond ratings;
- d) Off-balance sheet items.

#### Qualitative Criteria

- a) Counterparty market position;
- b) Management reputation;
- c) Executive succession plan;
- d) Power supply portfolio;
- e) Asset and investment quality;
- f) Risk profile of industry classification;
- g) Corporate strategy;
- h) Risk management capability; Credit Qualification and Approvals

#### Qualification for Unsecured Credit

Transmission counterparties may apply for unsecured credit by completing a BPA Credit Application and submitting it to an Account Executive or directly to Credit Risk Management. There are two methods for counterparties to potentially qualify for unsecured credit with the Transmission Provider.

#### Qualification Method 1

Following are the criteria that must be satisfied for qualification under Qualification Method 1:

- i) The counterparty is a distribution utility and has the direct authority to establish and adjust rates to recover costs, including power costs, without seeking approval from a regulatory agency;
- ii) The counterparty is not in default to the Transmission Provider or another known party and has not been in default to the Transmission Provider or another known party during the prior year; and
- iii) The counterparty has not experienced a material adverse change in its financial condition or payment practices during the prior year.

Counterparties qualifying for credit under Method 1 may alternatively choose to be evaluated for a higher credit limit under Method 2

#### Qualification Method 2

To qualify for credit under Qualification Method 2, counterparties must undergo a comprehensive creditworthiness evaluation. These counterparties are required to provide the following information:

- i) Three years of audited financial statements including income statement, balance sheet, cash flow statements, and accompanying footnotes (Counterparties without three years of audited financial statements should provide the maximum number of years available)

Counterparties that apply for unsecured credit under Method 2 will be assigned an internal credit rating based upon the evaluation of the quantitative and qualitative criteria listed in the Transmission Provider's current Business Practices. The Transmission Provider's internal credit rating has the same rating scale as Standard and Poor's (e.g. AAA, AA, A, BBB, BB, etc.).

All counterparties qualifying under Method 2 will be re-evaluated for creditworthiness at least annually and may be required to provide updated financial information to the Transmission Provider's Credit Risk Management department. Counterparties with internal credit ratings of investment grade or higher will qualify for unsecured credit. Counterparties rated below investment grade will need to provide an acceptable form of credit support.

#### **List of Acceptable Forms of Collateral/Security**

Counterparties whose internal rating are below investment grade or that previously were rated internally at or above investment grade, but are downgraded by the Transmission Provider as the result of a subsequent credit review to below grade, will be subject to credit support demands as described below.

Acceptable credit support could include one or a combination of the following:

- a. Corporate guarantee from an entity assigned by the Transmission Provider an internal rating of BBB- or better (pre-approved BPA standard guarantee form is available);
- b. Irrevocable Standby Letter of Credit from a financial institution assigned a Senior Unsecured Credit Rating from Moody's or Standard & Poor's of "A" or better;
- c. Prepayment arrangement;

- d. Contract amendment to shorten the credit exposure period and effectively reduce the Transmission Provider's settlement and potential incremental settlement exposures;
- e. Other form of credit support reasonably acceptable to the Transmission Provider.

**Notification of Changes in Creditworthiness and Ability to Post Additional Credit Security**

If the Transmission Provider determines there is a change in the creditworthiness of Transmission Customer or Transmission Customer's guarantor and such change would affect the level of credit security required by Transmission Provider, Transmission Provider will notify Transmission Customer in writing within thirty (30) days of such determination. In its notification to the Transmission Customer the Transmission Provider will identify any changes to Transmission Customer's credit security requirements. Should the Transmission Provider require the Transmission Customer to post new or additional credit security, the Transmission Customer must post credit security in an amount determined within five (5) business days of receipt of a written notification from Transmission Provider of a change in the creditworthiness of Transmission Customer or Transmission Customer's guarantor.

**Contesting Credit Determinations**

The Transmission Customer has the opportunity to contest the Transmission Provider's determination of Transmission Customer's creditworthiness or credit security requirements by submitting a written notice to the Transmission Provider explaining its reasons for contest.

**ATTACHMENT N**

**Standard Small Generator Interconnection Procedures (SGIP) including Standard Small  
Generator Interconnection Agreement (SGIA)**

**STANDARD SMALL GENERATOR  
INTERCONNECTION PROCEDURES (SGIP)**

**including**

**STANDARD SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**



**SMALL GENERATOR  
INTERCONNECTION PROCEDURES (SGIP)**

**(For Generating Facilities No Larger Than 20 MW)**

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Attachment 1 – Glossary of Terms

Attachment 2 – Small Generator Interconnection Request

Attachment 3 – Feasibility Study Agreement

Attachment 4 – System Impact Study Agreement

Attachment 5 – Facilities Study Agreement

## **Section 1. Application**

### **1.1 Applicability**

- 1.1.1** A request to interconnect a Small Generating Facility shall be evaluated under the section 3 Study Process.
- 1.1.2** Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of these procedures.
- 1.1.3** Intentionally Omitted.
- 1.1.4** Prior to submitting its Interconnection Request (Attachment 2), Interconnection Customer may ask Transmission Provider's interconnection contact employee or office whether the proposed interconnection is subject to these procedures. Transmission Provider shall use Reasonable Efforts to respond within 15 Business Days.
- 1.1.5** Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Federal Energy Regulatory Commission expects all Transmission Providers, market participants, and Interconnection Customers interconnected with electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.
- 1.1.6** References in these procedures to interconnection agreement are to the Small Generator Interconnection Agreement (SGIA).

### **1.2 Pre-Application**

Transmission Provider shall designate an employee or office from which information on the application process and on an Affected System can be obtained through informal requests from Interconnection Customer presenting a proposed project for a specific site. The name, telephone number, and e-mail address of such contact employee or office shall be made available on Transmission Provider's Internet web site. Electric system information provided to Interconnection Customer should include relevant system studies, interconnection studies, and other materials useful to an understanding of an interconnection at a particular point on Transmission Provider's Transmission System, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. Transmission Provider shall comply with reasonable requests for such information.

### **1.3 Interconnection Request**

Interconnection Customer shall submit its Interconnection Request to Transmission Provider, together with the deposit specified in the Interconnection Request. The

Interconnection Request shall be date- and time-stamped upon receipt. The original date- and time-stamp applied to the Interconnection Request at the time of its original submission shall be accepted as the qualifying date- and time-stamp for the purposes of any timetable in these procedures. Transmission Provider shall use Reasonable Efforts to notify Interconnection Customer of receipt of the Interconnection Request within three Business Days of receiving the Interconnection Request. Transmission Provider shall use Reasonable Efforts to notify Interconnection Customer within ten Business Days of the receipt of the Interconnection Request as to whether the Interconnection Request is complete or incomplete. If the Interconnection Request is incomplete, Transmission Provider shall provide along with the notice that the Interconnection Request is incomplete, a written list detailing all information that must be provided to complete the Interconnection Request. Interconnection Customer will have ten Business Days after receipt of the notice to submit the listed information or to request an extension of time to provide such information. If Interconnection Customer does not provide the listed information or a request for an extension of time within the deadline, the Interconnection Request will be deemed withdrawn. An Interconnection Request will be deemed complete upon submission of the listed information to Transmission Provider.

#### **1.4 Modification of the Interconnection Request**

Any modification to machine data or equipment configuration or to the interconnection site of the Small Generating Facility not agreed to in writing by Transmission Provider and Interconnection Customer may be deemed a withdrawal of the Interconnection Request and may require submission of a new Interconnection Request, unless proper notification of each Party by the other and a reasonable time to cure the problems created by the changes are undertaken.

#### **1.5 Site Control**

Documentation of site control must be submitted with the Interconnection Request. Site control may be demonstrated through:

- 1.5.1** Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Small Generating Facility;
- 1.5.2** An option to purchase or acquire a leasehold site for such purpose; or
- 1.5.3** 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.

#### **1.6 Queue Position**

Transmission Provider shall assign a Queue Position based upon the date- and time-stamp of the Interconnection Request. The Queue Position of each Interconnection Request will be used to determine the cost responsibility for the Upgrades necessary to accommodate the interconnection. Transmission Provider shall maintain a single queue per geographic region. At Transmission Provider's option, Interconnection Requests may be studied serially or in clusters for the purpose of the system impact study.

**1.7 Interconnection Requests Submitted Prior to the Effective Date of the SGIP**

Nothing in this SGIP affects an Interconnection Customer's Queue Position assigned before the effective date of this SGIP. The Parties agree to complete work on any interconnection study agreement executed prior the effective date of this SGIP in accordance with the terms and conditions of that interconnection study agreement. Any new studies or other additional work will be completed pursuant to this SGIP.

**Section 2. Fast Track Process. Intentionally Omitted.****Section 3. Study Process****3.1 Applicability**

Except as otherwise provided in the SGIP, the section 3 Study Process shall be used by an Interconnection Customer proposing to interconnect its Small Generating Facility with Transmission Provider's Transmission System.

**3.2 Scoping Meeting**

**3.2.1** Transmission Provider shall use Reasonable Efforts to hold a scoping meeting with Interconnection Customer within ten Business Days after the Interconnection Request is deemed complete, or as otherwise mutually agreed to by the Parties. Transmission Provider and Interconnection Customer will bring to the meeting personnel, including system engineers and other resources as may be reasonably required to accomplish the purpose of the meeting.

**3.2.2** The purpose of the scoping meeting is to discuss the Interconnection Request and review existing studies relevant to the Interconnection Request. The Parties shall further discuss whether Transmission Provider should perform a feasibility study or proceed directly to a system impact study, or a facilities study, or an interconnection agreement. If the Parties agree that a feasibility study should be performed, Transmission Provider shall use Reasonable Efforts to provide a feasibility study agreement (Attachment 3) to Interconnection Customer within five Business Days after the scoping meeting, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.

**3.2.3** The scoping meeting may be omitted by mutual agreement. In order to remain in consideration for interconnection, an Interconnection Customer who has requested a feasibility study must return the executed feasibility study agreement within 15 Business Days. If the Parties agree not to perform a feasibility study, Transmission Provider shall use Reasonable Efforts to provide a system impact study agreement (Attachment 4) to Interconnection Customer within five Business Days after the scoping meeting, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.

**3.2.4** As soon as practicable after the scoping meeting, Transmission Provider shall tender to Interconnection Customer a NEPA study agreement authorizing Transmission Provider, at Interconnection Customer's expense, to perform environmental review of the proposed interconnection, and setting forth Interconnection Customer's responsibilities in connection with such environmental review. Interconnection Customer shall execute and return the NEPA study agreement within 30 days of receipt or its Interconnection Request shall be deemed withdrawn and the unexpended amount of its deposit, if any, shall be returned.

### **3.3 Feasibility Study**

**3.3.1** The feasibility study shall identify any potential adverse system impacts that would result from the interconnection of the Small Generating Facility.

**3.3.2** A deposit of the good faith estimated feasibility study costs or \$5,000, whichever is greater, shall be required from Interconnection Customer prior to the initiation of the study work.

**3.3.3** The scope of and cost responsibilities for the feasibility study are described in the attached feasibility study agreement (Attachment 3).

**3.3.4** If the feasibility study shows no potential for adverse system impacts, Transmission Provider shall send Interconnection Customer a facilities study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study. If no additional facilities are required, Transmission Provider shall decide whether to send Interconnection Customer an executable interconnection agreement in accordance with section 3.5.7 of these procedures.

**3.3.5** If the feasibility study shows the potential for adverse system impacts, the review process shall proceed to the appropriate system impact study(s).

### **3.4 System Impact Study**

**3.4.1** A system impact study shall identify and detail the electric system impacts that would result if the proposed Small Generating Facility were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts identified in the feasibility study, or to study potential impacts, including but not limited to those identified in the scoping meeting. A system impact study shall evaluate the impact of the proposed interconnection on the reliability of the electric system.

**3.4.2** If no transmission system impact study is required, but potential electric power Distribution System adverse system impacts are identified in the scoping meeting or shown in the feasibility study, a distribution system impact study must be performed. Transmission Provider shall use Reasonable Efforts to send Interconnection Customer a distribution system impact study agreement within

15 Business Days of transmittal of the feasibility study report, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or following the scoping meeting if no feasibility study is to be performed.

- 3.4.3** In instances where the feasibility study or the distribution system impact study shows potential for transmission system adverse system impacts, within five Business Days following transmittal of the feasibility study report, Transmission Provider shall use Reasonable Efforts to send Interconnection Customer a transmission system impact study agreement including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, if such a study is required.
- 3.4.4** If a transmission system impact study is not required, but electric power Distribution System adverse system impacts are shown by the feasibility study to be possible and no distribution system impact study has been conducted, Transmission Provider shall send Interconnection Customer a distribution system impact study agreement.
- 3.4.5** If the feasibility study shows no potential for transmission system or Distribution System adverse system impacts, Transmission Provider shall send Interconnection Customer either a facilities study agreement (Attachment 5), including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or shall decide whether to send Interconnection Customer an executable interconnection agreement in accordance with section 3.5.7 of these procedures, as applicable.
- 3.4.6** In order to remain under consideration for interconnection, Interconnection Customer must return executed system impact study agreements, if applicable, within 30 Business Days.
- 3.4.7** A deposit of the good faith estimated costs for each system impact study shall be required from Interconnection Customer prior to the initiation of the study work.
- 3.4.8** The scope of and cost responsibilities for a system impact study are described in the attached system impact study agreement.
- 3.4.9** Where transmission systems and Distribution Systems have separate owners, such as is the case with transmission-dependent utilities ("TDUs") – whether investor- owned or not – Interconnection Customer may apply to the nearest Transmission Provider (Transmission Owner, Regional Transmission Operator, or Independent Transmission Provider) providing transmission service to the TDU to request project coordination. Affected Systems shall participate in the study and provide all information necessary to prepare the study.

### **3.5 Facilities Study**

- 3.5.1** Once the required system impact study(s) is completed, Transmission Provider shall use Reasonable Efforts to prepare and transmit within five Business Days a system impact study report to Interconnection Customer along with a facilities study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the facilities study. In the case where one or both impact studies are determined to be unnecessary, a notice of the fact shall be transmitted to Interconnection Customer within the same timeframe.
- 3.5.2** In order to remain under consideration for interconnection, or, as appropriate, in Transmission Provider's interconnection queue, Interconnection Customer must return the executed facilities study agreement or a request for an extension of time within 30 Business Days.
- 3.5.3** The facilities study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s), as appropriate.
- 3.5.4** Design for any required Interconnection Facilities and/or Upgrades shall be performed under the facilities study agreement. Transmission Provider may contract with consultants to perform activities required under the facilities study agreement. Interconnection Customer and Transmission Provider may agree to allow Interconnection Customer to separately arrange for the design of some of the Interconnection Facilities. In such cases, facilities design will be reviewed and/or modified prior to acceptance by Transmission Provider, under the provisions of the facilities study agreement. If the Parties agree to separately arrange for design and construction, and provided security and confidentiality requirements can be met, Transmission Provider shall make sufficient information available to Interconnection Customer in accordance with confidentiality and critical infrastructure requirements to permit Interconnection Customer to obtain an independent design and cost estimate for any necessary facilities.
- 3.5.5** A deposit of the good faith estimated costs for the facilities study shall be required from Interconnection Customer prior to the initiation of the study work.
- 3.5.6** The scope of and cost responsibilities for the facilities study are described in the attached facilities study agreement.
- 3.5.7** Upon completion of the facilities study, and with the agreement of Interconnection Customer to pay for Interconnection Facilities and Upgrades identified in the facilities study, Transmission Provider shall decide whether to send Interconnection Customer an executable interconnection agreement after completing necessary environmental documentation under the National



Environmental Policy Act of 1969, 42 U.S.C. § 4321, et seq., as amended, concerning the interconnection of the Small Generating Facility; provided, that Transmission Provider's decision shall not be subject to dispute resolution. If Transmission Provider decides to send Interconnection Customer an executable interconnection agreement, Transmission Provider shall use Reasonable Efforts to send such agreement within five Business Days after rendering its decision.

#### **Section 4. Provisions that Apply to All Interconnection Requests**

##### **4.1 Reasonable Efforts**

Transmission Provider shall make Reasonable Efforts to meet all time frames provided in these procedures unless Transmission Provider and Interconnection Customer agree to a different schedule. If Transmission Provider cannot meet a deadline provided herein, it shall notify Interconnection Customer, explain the reason for the failure to meet the deadline, and provide an estimated time by which it will complete the applicable interconnection procedure in the process.

##### **4.2 Disputes**

**4.2.1** The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

**4.2.2** In the event of a dispute, 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.

**4.2.3** In the event the designated representatives are unable to resolve the claim or dispute through unassisted negotiations within thirty (30) calendar days of the other Party's receipt of the Notice of Dispute, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

**4.2.4** The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

**4.2.5** Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

**4.2.6** If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of these procedures.

**4.3 Interconnection Metering**

Any metering necessitated by the use of the Small Generating Facility shall be installed at Interconnection Customer's expense in accordance with Transmission Provider's specifications.

**4.4 Commissioning**

Commissioning tests of Interconnection Customer's installed equipment shall be performed pursuant to applicable codes and standards. Transmission Provider must be given at least five Business Days written notice, or as otherwise mutually agreed to by the Parties, of the tests and may be present to witness the commissioning tests.

**4.5 Confidentiality**

**4.5.1** Confidential information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of these procedures all design, operating specifications, and metering data provided by Interconnection Customer shall be deemed confidential information regardless of whether it is clearly marked or otherwise designated as such.

**4.5.2** Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or is otherwise required to be disclosed by law or subpoena, including the Freedom of Information Act, 5 U.S.C. § 552, as amended, or necessary to be divulged in an action to enforce these procedures. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under these procedures, or to fulfill legal or regulatory requirements.

**4.5.2.1** Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.

**4.5.3** Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, 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 these procedures, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party prior to the release of the Confidential Information to FERC. The Party shall notify the other Party when it is notified by FERC that a request to release Confidential

Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **4.6 Comparability**

Transmission Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this document. Transmission Provider shall use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Small Generating Facility is owned or operated by Transmission Provider, its subsidiaries or affiliates, or others.

#### **4.7 Record Retention**

Transmission Provider shall maintain for three years records, subject to audit, of all Interconnection Requests received under these procedures, the times required to complete Interconnection Request approvals and disapprovals, and justification for the actions taken on the Interconnection Requests.

#### **4.8 Interconnection Agreement**

If Transmission Provider decides to offer Interconnection Customer an executable interconnection agreement in accordance with section 3.5.7 of these procedures, Interconnection Customer shall have 30 Business Days or another mutually agreeable timeframe to sign and return the interconnection agreement. If Interconnection Customer does not sign the interconnection agreement, the Interconnection Request shall be deemed withdrawn. After the interconnection agreement is signed by the Parties, the interconnection of the Small Generating Facility shall proceed under the provisions of the interconnection agreement.

#### **4.9 Coordination with Affected Systems**

Transmission Provider shall coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System operators and, if possible, include those results (if available) in its applicable interconnection study within the time frame specified in these procedures. Transmission Provider will include such Affected System operators in all meetings held with Interconnection Customer as required by these procedures.

Interconnection Customer will cooperate with Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems. A Transmission Provider, which may be an Affected System, shall cooperate with Transmission Provider with whom interconnection has been requested in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

**4.10 Capacity of the Small Generating Facility**

- 4.10.1** If the Interconnection Request is for an increase in capacity for an existing Small Generating Facility, the Interconnection Request shall be evaluated on the basis of the new total capacity of the Small Generating Facility.
- 4.10.2** If the Interconnection Request is for a Small Generating Facility that includes multiple energy production devices at a site for which Interconnection Customer seeks a single Point of Interconnection, the Interconnection Request shall be evaluated on the basis of the aggregate capacity of the multiple devices.
- 4.10.3** The Interconnection Request shall be evaluated using the maximum rated capacity of the Small Generating Facility.

**Section 5. EIM****5.1 EIM Requirements**

Interconnection Customer shall have a continuing duty to comply with Attachment Q of this Tariff, as applicable.

## Attachment 1 Glossary of Terms

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

**Business Day** – Monday through Friday, excluding Federal Holidays.

**Distribution System** – 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** – The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce.

Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** – 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.

**Interconnection Customer** – Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** – The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** – The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** – A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** – Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection with the Small Generating Facility to the Transmission Provider's Transmission System. Network Upgrades do not include Distribution Upgrades.

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

**Point of Interconnection** – The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Queue Position** – 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** – With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Procedures, 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.

**Small Generating Facility** – The Interconnection Customer's device for the production of electricity identified in the Interconnection Request. The Small Generating Facility shall be no larger than 20 MW, and shall not include the Interconnection Customer's Interconnection Facilities.

**Study Process** – The procedure for evaluating an Interconnection Request that includes the section 3 scoping meeting, feasibility study, system impact study, and facilities study.

**Transmission Owner** – The 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 Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** – The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**Transmission System** – The facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** – The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Attachment 2**

**SMALL GENERATOR INTERCONNECTION REQUEST  
(Application Form)**

**Transmission Provider:** \_\_\_\_\_

Designated Contact Person:

\_\_\_\_\_

Address:

\_\_\_\_\_

Telephone Number:

\_\_\_\_\_

Fax:

\_\_\_\_\_

E-Mail Address:

\_\_\_\_\_

An Interconnection Request is considered complete when it provides all applicable and correct information required below. Per SGIP section 1.5, documentation of site control must be submitted with the Interconnection Request.

**Preamble and Instructions**

An Interconnection Customer who requests a Federal Energy Regulatory Commission jurisdictional interconnection must submit this Interconnection Request by hand delivery, mail, e-mail, or fax to Transmission Provider.

**Deposit:**

Interconnection Customer shall submit to Transmission Provider a deposit of \$2,500 towards the costs of the scoping meeting and the feasibility study.

**Interconnection Customer Information**

Legal Name of Interconnection Customer (or, if an individual, individual's name)

Name:

Contact Person:



Mailing Address:

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Facility Location (if different from above):

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Alternative Contact Information (if different from Interconnection Customer)

Contact Name:

Title:

Address:

\_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Application is for: \_\_\_\_\_ New Small Generating Facility  
\_\_\_\_\_ Capacity addition to Existing Small Generating Facility

If capacity addition to existing facility, please describe:

\_\_\_\_\_

Will the Small Generating Facility be used for any of the following?

Net Metering? Yes \_\_ No \_\_\_\_  
To Supply Power to Interconnection Customer? Yes \_\_ No \_\_\_\_ To Supply Power to  
Others? Yes \_\_\_\_\_ No \_\_\_\_

For installations at locations with existing electric service to which the proposed Small Generating Facility will interconnect, provide:

\_\_\_\_\_

\_\_\_\_\_

(Local Electric Service Provider\*)

(Existing Account Number\*)

[\*To be provided by Interconnection Customer if the local electric service provider is different from Transmission Provider]

Contact Name:

\_\_\_\_\_

Title:

\_\_\_\_\_

Address:

\_\_\_\_\_

\_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Requested Point of Interconnection:

Interconnection Customer's Requested In-Service Date:

**Small Generating Facility Information**

Data apply only to the Small Generating Facility, not the Interconnection Facilities.

Energy Source: \_\_\_Solar\_\_\_ Wind\_\_\_ Hydro\_\_\_ Hydro Type (e.g. Run-of-River):  
Diesel\_\_\_ Natural Gas\_\_\_ Fuel Oil\_\_\_ Other (state type)

\_\_\_\_\_

Prime Mover: \_\_\_Fuel Cell \_\_\_Recip Engine \_\_\_Gas Turb \_\_\_Steam  
\_\_\_Microturbine \_\_\_PV Turb \_\_\_Other

Type of Generator: \_\_\_Synchronous \_\_\_Induction \_\_\_Inverter

Generator Nameplate Rating: \_\_\_\_\_ kW (Typical)      Generator Nameplate kVAR: \_\_\_\_\_

Interconnection Customer or Customer-Site Load: \_\_\_\_\_ kW (if

none, so state) Typical Reactive Load (if known): \_\_

Maximum Physical Export Capability Requested: \_\_\_\_\_ kW

Generator (or solar collector)  
Manufacturer, Model Name & Number: \_\_\_\_\_

Version Number: \_\_\_\_\_

Nameplate Output Power Rating in kW: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Nameplate Output Power Rating in kVA: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Individual Generator Power Factor  
Rated Power Factor: Leading: \_\_\_\_\_ Lagging: \_\_\_\_\_

Total Number of Generators in wind farm to be interconnected pursuant to this  
Interconnection Request: \_\_\_\_\_ Elevation: \_\_\_\_\_      \_\_\_ Single phase    \_\_\_ Three  
phase

Inverter Manufacturer, Model Name & Number (if used):  
\_\_\_\_\_

List of adjustable set points for the protective equipment or software: \_\_\_\_\_

Note: A completed Power Systems Load Flow data sheet must be supplied with the  
Interconnection Request.

Small Generating Facility Characteristic Data (for inverter-based machines)

Max design fault contribution current: \_\_\_\_\_      Instantaneous \_\_\_ or RMS? \_\_\_\_\_

Harmonics Characteristics: \_\_\_\_\_

Start-up requirements: \_\_\_\_\_

Small Generating Facility Characteristic Data (for rotating machines)

RPM Frequency: \_\_\_\_\_  
(\* Neutral Grounding Resistor (If Applicable): \_\_\_\_\_

Synchronous Generators:

Direct Axis Synchronous Reactance,  $X_d$ : \_\_\_\_\_ P.U. Direct Axis Transient Reactance,  $X'_d$ : \_\_\_\_\_ P.U.

Direct Axis Subtransient Reactance,  $X''_d$ : \_\_\_\_\_ P.U. Negative Sequence Reactance,  $X_2$ : \_\_\_\_\_ P.U.

Zero Sequence Reactance,  $X_0$ : \_\_\_\_\_ P.U. KVA Base: \_\_\_\_\_

Field Volts: \_\_\_\_\_ Field Amperes: \_\_\_\_\_

Induction Generators:

Motoring Power (kW): \_\_\_\_\_

$I^2t$  or K (Heating Time Constant): \_\_\_\_\_ Rotor Resistance,  $R_r$ : \_\_\_\_\_

Stator Resistance,  $R_s$ : \_\_\_\_\_ Stator Reactance,  $X_s$ : \_\_\_\_\_ Rotor

Reactance,  $X_r$ : \_\_\_\_\_

Magnetizing Reactance,  $X_m$ : \_\_\_\_\_

Short Circuit Reactance,  $X_d''$ : \_\_\_\_\_ Exciting Current: \_\_\_\_\_

Temperature Rise: \_\_\_\_\_

Frame Size: \_\_\_\_\_ Design Letter: \_\_\_\_\_

Reactive Power Required In Vars (No Load): \_\_\_\_\_ Reactive Power Required In Vars (Full Load): \_\_\_\_\_

Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on kVA Base

Note: Please contact Transmission Provider prior to submitting the Interconnection Request to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

**Interconnection Facilities Information**

Will a transformer be used between the generator and the point of common coupling? \_\_\_\_\_ Yes \_\_\_\_\_ No Will the transformer be provided by Interconnection Customer? \_\_\_\_\_ Yes \_\_\_\_\_ No

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

Is the transformer: \_\_\_ single phase \_\_\_ three phase? Size: \_\_\_\_\_ kVA  
 Transformer Impedance: \_\_\_\_\_% on \_\_\_\_\_ kVA Base

If Three Phase:

Transformer Primary: \_\_\_ Volts \_\_\_ Delta \_\_\_ Wye \_\_\_ Wye  
 Grounded Transformer Secondary: \_\_\_ Volts \_\_\_ Delta \_\_\_ Wye \_\_\_ Wye  
 Grounded Transformer Tertiary: \_\_\_ Volts \_\_\_ Delta \_\_\_ Wye \_\_\_ Wye  
 Grounded

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

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current

Curves) Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Size: \_\_\_\_\_ Speed: \_\_\_\_\_

Interconnecting Circuit Breaker (if applicable):

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_  
 Load Rating (Amps): \_\_\_\_\_ Interrupting Rating (Amps): \_\_\_\_\_ Trip Speed (Cycles): \_\_\_\_\_

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

Setpoint Function	Minimum	Maximum
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____

5. \_\_\_\_\_

6. \_\_\_\_\_

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer:\_\_\_\_\_Type:\_\_\_\_\_Style/Catalog No.:\_\_\_\_\_Proposed Setting:

Manufacturer:\_\_\_\_\_Type:\_\_\_\_\_Style/Catalog No.:\_\_\_\_\_Proposed Setting:

Manufacturer:\_\_\_\_\_Type:\_\_\_\_\_Style/Catalog No.:\_\_\_\_\_Proposed Setting:

Manufacturer:\_\_\_\_\_Type:\_\_\_\_\_Style/Catalog No.:\_\_\_\_\_Proposed Setting:

Manufacturer:\_\_\_\_\_Type:\_\_\_\_\_Style/Catalog No.:\_\_\_\_\_Proposed Setting:

Current Transformer Data (If Applicable):

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_\_ Proposed Ratio Connection: \_\_

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_\_ Proposed Ratio Connection: \_\_

Potential Transformer Data (If Applicable):

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_\_ Proposed Ratio Connection: \_\_

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_\_ Proposed Ratio Connection: \_\_

**General Information**

Enclose copy of site electrical one-line diagram showing the configuration of all Small Generating Facility equipment, current and potential circuits, and protection and control schemes. This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Small Generating Facility is larger than 50 kW. Is One-Line Diagram Enclosed? \_\_\_\_\_ Yes \_\_\_ No

Enclose copy of any site documentation that indicates the precise physical location of

the proposed Small Generating Facility (e.g., USGS topographic map or other diagram or documentation).

Proposed location of protective interface equipment on property (include address if different from Interconnection Customer's address) \_\_\_\_\_

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Available

Documentation Enclosed? \_\_\_\_\_ Yes \_\_\_ No

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).

Are Schematic Drawings Enclosed? \_Yes\_\_\_No

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request is true and correct.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

**Attachment 3****Feasibility Study Agreement**

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

**RECITALS**

Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by Interconnection Customer on \_\_\_\_\_; and

Interconnection Customer desires to interconnect the Small Generating Facility with Transmission Provider's Transmission System; and

Interconnection Customer has requested Transmission Provider to perform a feasibility study to assess the feasibility of interconnecting the proposed Small Generating Facility with Transmission Provider's Transmission System, and of any Affected Systems;

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed an interconnection feasibility study consistent with the standard Small Generator Interconnection Procedures in accordance with Transmission Provider's Open Access Transmission Tariff.
- 3.0 The scope of the feasibility study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The feasibility study shall be based on the technical information provided by Interconnection Customer in the Interconnection Request, as may be modified as the result of the scoping meeting. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the



feasibility study and as designated in accordance with the standard Small Generator Interconnection Procedures. If Interconnection Customer modifies its Interconnection Request, the time to complete the feasibility study may be extended by agreement of the Parties.

- 5.0 In performing the study, Transmission Provider shall rely, to the extent reasonably practicable, on existing studies of recent vintage. Interconnection Customer shall not be charged for such existing studies; however, Interconnection Customer shall be responsible for charges associated with any new study or modifications to existing studies that are reasonably necessary to perform the feasibility study.
- 6.0 The feasibility study report shall provide the following analyses for the purpose of identifying any potential adverse system impacts that would result from the interconnection of the Small Generating Facility as proposed:
  - 6.1 Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
  - 6.2 Initial identification of any thermal overload or voltage limit violations resulting from the interconnection;
  - 6.3 Initial review of grounding requirements and electric system protection; and
  - 6.4 Description and non-binding estimated cost of facilities required to interconnect the proposed Small Generating Facility and to address the identified short circuit and power flow issues.
- 7.0 The feasibility study shall model the impact of the Small Generating Facility regardless of purpose in order to avoid the further expense and interruption of operation for reexamination of feasibility and impacts if Interconnection Customer later changes the purpose for which the Small Generating Facility is being installed.
- 8.0 The study shall include the feasibility of any interconnection at a proposed project site where there could be multiple potential Points of Interconnection, as requested by Interconnection Customer and at Interconnection Customer's cost.
- 9.0 A deposit of the good faith estimated feasibility study costs or \$5,000, whichever is greater, shall be required from Interconnection Customer prior to the initiation of study work.
- 10.0 Once the feasibility study is completed, a feasibility study report shall be prepared and transmitted to Interconnection Customer. Transmission Provider shall use Reasonable Efforts to complete the feasibility study and transmit the feasibility study report to Interconnection Customer within 30 Business Days of Interconnection Customer's agreement to conduct a feasibility study.

- 11.0 Any study fees shall be based on Transmission Provider's actual costs and will be invoiced to Interconnection Customer along with a summary of professional time.
- 12.0 Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, Transmission Provider shall use Reasonable Efforts to refund such excess within 30 calendar days of the invoice without interest.
- 13.0 Governing Law, Regulatory Authority, and Rules  
The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by federal law as applicable. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
- 14.0 Amendment  
The Parties may amend this Agreement by a written instrument duly executed by both Parties.
- 15.0 No Third-Party Beneficiaries  
This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.
- 16.0 Waiver
- 16.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 16.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement 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 Agreement shall, if requested, be provided in writing.
- 17.0 Multiple Counterparts  
This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 18.0 No Partnership  
This Agreement 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.

19.0 Severability

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

20.0 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

20.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall Transmission Provider be liable for the actions or inactions of Interconnection Customer or its subcontractors with respect to obligations of Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

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

**Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(INTERCONNECTION CUSTOMER NAME)      UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
*(Print/Type)*

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

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

**Attachment A to  
Feasibility Study Agreement**

**Assumptions Used in Conducting the Feasibility Study**

The feasibility study will be based upon the information set forth in the Interconnection Request and agreed upon in the scoping meeting held on \_\_\_\_\_:

- 1) Designation of Point of Interconnection and configuration to be studied.
  
- 2) Designation of alternative Points of Interconnection and configuration.

1) and 2) are to be completed by Interconnection Customer. Other assumptions (listed below) are to be provided by Interconnection Customer and Transmission Provider.

**Attachment 4****System Impact Study Agreement**

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

**RECITALS**

Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by Interconnection Customer on \_\_\_\_\_; and

Interconnection Customer desires to interconnect the Small Generating Facility with Transmission Provider's Transmission System; and

Transmission Provider has completed a feasibility study and provided the results of said study to Interconnection Customer (This recital to be omitted if the Parties have agreed to forego the feasibility study.); and

Interconnection Customer has requested Transmission Provider to perform a system impact study(s) to assess the impact of interconnecting the Small Generating Facility with Transmission Provider's Transmission System, and of any Affected Systems;

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed a system impact study(s) consistent with the standard Small Generator Interconnection Procedures in accordance with Transmission Provider's Open Access Transmission Tariff.
- 3.0 The scope of a system impact study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 A system impact study will be based upon the results of the feasibility study and the technical information provided by Interconnection Customer in the Interconnection

Request. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the system impact study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the system impact study may be extended.

- 5.0 A system impact study shall consist of a short circuit analysis, a stability analysis, a power flow analysis, voltage drop and flicker studies, protection and set point coordination studies, and grounding reviews, as necessary. A system impact study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. A system impact study shall provide a list of facilities that are required as a result of the Interconnection Request and non-binding good faith estimates of cost responsibility and time to construct.
- 6.0 A distribution system impact study shall incorporate a distribution load flow study, an analysis of equipment interrupting ratings, protection coordination study, voltage drop and flicker studies, protection and set point coordination studies, grounding reviews, and the impact on electric system operation, as necessary.
- 7.0 Affected Systems may participate in the preparation of a system impact study, with a division of costs among such entities as they may agree. All Affected Systems shall be afforded an opportunity to review and comment upon a system impact study that covers potential adverse system impacts on their electric systems, and Transmission Provider shall use Reasonable Efforts to complete within 20 additional Business Days a system impact study requiring review by Affected Systems.
- 8.0 If Transmission Provider uses a queuing procedure for sorting or prioritizing projects and their associated cost responsibilities for any required Network Upgrades, the system impact study shall consider all generating facilities (and with respect to paragraph 8.3 below, any identified Upgrades associated with such higher queued interconnection) that, on the date the system impact study is commenced –
  - 8.1 Are directly interconnected with Transmission Provider's electric system; or
  - 8.2 Are interconnected with Affected Systems and may have an impact on the proposed interconnection; and
  - 8.3 Have a pending higher queued Interconnection Request to interconnect with Transmission Provider's electric system.
- 9.0 If required to complete a distribution system impact study, Transmission Provider shall use Reasonable Efforts to complete the study and transmit the results to Interconnection Customer within 30 Business Days after this Agreement is signed by the Parties. If required to complete a transmission system impact study, Transmission Provider shall

use Reasonable Efforts to complete the study and transmit the results to Interconnection Customer within 45 Business Days after this Agreement is signed by the Parties, or in accordance with Transmission Provider's queuing procedures.

- 10.0 A deposit of the equivalent of the good faith estimated cost of a distribution system impact study and the good faith estimated cost of a transmission system impact study shall be required from Interconnection Customer prior to the initiation of study work.
- 11.0 Any study fees shall be based on Transmission Provider's actual costs and will be invoiced to Interconnection Customer along with a summary of professional time.
- 12.0 Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, Transmission Provider shall use Reasonable Efforts to refund such excess within 30 calendar days of the invoice without interest.
- 13.0 Governing Law, Regulatory Authority, and Rules  
The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by federal law. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
- 14.0 Amendment  
The Parties may amend this Agreement by a written instrument duly executed by both Parties.
- 15.0 No Third-Party Beneficiaries  
This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.
- 16.0 Waiver
- 16.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 16.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement 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 Agreement shall, if requested, be provided in writing.



17.0 Multiple Counterparts

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

18.0 No Partnership

This Agreement 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.

19.0 Severability

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

20.0 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

20.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall Transmission Provider be liable for the actions or inactions of Interconnection Customer or its subcontractors with respect to obligations of Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

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

**Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(INTERCONNECTION CUSTOMER NAME) UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
*(Print/Type)*

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

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

**Attachment A to System  
Impact Study Agreement**

**Assumptions Used in Conducting the System Impact Study**

The system impact study shall be based upon the results of the feasibility study, subject to any modifications in accordance with the standard Small Generator Interconnection Procedures, and the following assumptions:

- 1) Designation of Point of Interconnection and configuration to be studied.
  
- 2) Designation of alternative Points of Interconnection and configuration.

1) and 2) are to be completed by Interconnection Customer. Other assumptions (listed below) are to be provided by Interconnection Customer and Transmission Provider.

## Attachment 5

### Facilities Study Agreement

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

#### RECITALS

Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by Interconnection Customer on \_\_\_\_\_; and

Interconnection Customer desires to interconnect the Small Generating Facility with Transmission Provider's Transmission System; and

Transmission Provider has completed a system impact study and provided the results of said study to Interconnection Customer; and

Interconnection Customer has requested Transmission Provider to perform a facilities study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the system impact study in accordance with Good Utility Practice to physically and electrically connect the Small Generating Facility with Transmission Provider's Transmission System.

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause a facilities study consistent with the standard Small Generator Interconnection Procedures to be performed in accordance with Transmission Provider's Open Access Transmission Tariff.
- 3.0 The scope of the facilities study shall be subject to data provided in Attachment A to this Agreement.
- 4.0 The facilities study shall specify and provide a non-binding good faith estimate of the

cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s). The facilities study shall also identify (1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, (2) the nature and estimated cost of Transmission Provider's Interconnection Facilities and Upgrades necessary to accomplish the interconnection, and (3) an estimate of the time required to complete the construction and installation of such facilities.

- 5.0 Transmission Provider may propose to group facilities required for more than one Interconnection Customer in order to minimize facilities costs through economies of scale, but any Interconnection Customer may require the installation of facilities required for its own Small Generating Facility if it is willing to pay the costs of those facilities.
- 6.0 A deposit of the good faith estimated facilities study costs shall be required from Interconnection Customer prior to the initiation of study work.
- 7.0 In cases where Upgrades are required, Transmission Provider shall use Reasonable Efforts to complete the facilities study within 45 Business Days of the receipt of this Agreement. In cases where no Upgrades are necessary, and the required facilities are limited to Interconnection Facilities, Transmission Provider shall use Reasonable Efforts to complete the facilities study within 30 Business Days.
- 8.0 Once the facilities study is completed, a facilities study report shall be prepared and transmitted to Interconnection Customer. Transmission Provider shall use Reasonable Efforts to complete the facilities study and transmit the facilities study report to Interconnection Customer within 30 Business Days of Interconnection Customer's agreement to conduct a facilities study.
- 9.0 Any study fees shall be based on Transmission Provider's actual costs and will be invoiced to Interconnection Customer along with a summary of professional time.
- 10.0 Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, Transmission Provider shall use Reasonable Efforts to refund such excess within 30 calendar days of the invoice without interest.
- 11.0 Governing Law, Regulatory Authority, and Rules  
The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by federal law. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

12.0 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties.

13.0 No Third-Party Beneficiaries

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

14.0 Waiver

14.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

14.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement 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 Agreement shall, if requested, be provided in writing.

15.0 Multiple Counterparts

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

16.0 No Partnership

This Agreement 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.

17.0 Severability

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

18.0 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement;

provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

18.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall Transmission Provider be liable for the actions or inactions of Interconnection Customer or its subcontractors with respect to obligations of Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

18.2 The obligations under this article will not be limited in any way by any limitation of subcontractor’s insurance.

**Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(INTERCONNECTION CUSTOMER NAME) UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
(Print/Type)

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

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

**Attachment A to  
Facilities Study Agreement**

**Data to Be Provided by Interconnection Customer  
with the Facilities Study Agreement**

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

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

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

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

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

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

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

\_\_\_\_\_  
\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_  
\_\_\_\_\_

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

Physical dimensions of the proposed interconnection station:

\_\_\_\_\_



Bus length from generation to interconnection station:

\_\_\_\_\_

Line length from interconnection station to Transmission Provider's Transmission System.

\_\_\_\_\_

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

\_\_\_\_\_

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

\_\_\_\_\_

\* To be completed in coordination with Transmission Provider.

Is the Small Generating Facility located in Transmission Provider's service area?

Yes \_\_\_\_\_ No \_\_\_\_\_ If No, please provide name of local provider:

\_\_\_\_\_

Please provide the following proposed schedule dates:

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

Generator step-up transformers receive back feed power Date: \_\_\_\_\_

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

Commercial Operation

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**

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Attachment 6 – Transmission Provider’s Description of its Upgrades and Best Estimate of  
Upgrade Costs

**THIS SMALL GENERATOR INTERCONNECTION AGREEMENT**

("Agreement") is made and entered into this \_\_ day of \_\_\_\_\_ 20\_\_, by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_, ("Interconnection Customer") and the U.S. Department of Energy, acting by and through the Bonneville Power Administration, ("Transmission Provider). Interconnection Customer and Transmission Provider each may be referred to as a "Party" or collectively as the "Parties.

**RECITALS**

Transmission Provider operates the Transmission System;

Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Small Generating Facility;

Interconnection Customer and Transmission Provider have agreed to enter into this Agreement for the purpose of interconnecting the Small Generating Facility with Transmission Provider System;

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

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

**1.1 Applicability**

This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP).

**1.2 Purpose**

This Agreement governs the terms and conditions under which Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, Transmission Provider's Transmission System.

**1.3 No Agreement to Purchase or Deliver Power**

This Agreement does not constitute an agreement to purchase or deliver Interconnection Customer's power. The purchase or delivery of power and other services that Interconnection Customer may require will be covered under separate agreements, if any. Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.

**1.4 Limitation**

Nothing in this Agreement is intended to affect any other agreement between Transmission Provider and Interconnection Customer.

## **1.5 Responsibilities of the Parties**

**1.5.1** Intentionally Omitted.

**1.5.2** The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.

**1.5.3** Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.

**1.5.4** Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.

**1.5.5** Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of Transmission Provider and any Affected Systems.

**1.5.6** Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. Transmission Provider and Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect Transmission Provider's Transmission System, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

**1.5.7** Transmission Provider shall coordinate with all Affected Systems to support the interconnection.

## **1.6 Parallel Operation Obligations**

Once the Small Generating Facility has been authorized to commence parallel operation, Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to; (1) the rules and procedures concerning the operation of

generation set forth in the Tariff or by the applicable system operator(s) for Transmission Provider's Transmission System and; (2) the Operating Requirements set forth in Attachment 5 of this Agreement.

### **1.7 Metering**

Interconnection Customer shall be responsible for Transmission Provider's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachments 2 and 3 of this Agreement. Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

### **1.8 Reactive Power**

**1.8.1** Interconnection Customer shall design its Small 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 similarly situated generators in the control area on a comparable basis. The requirements of this paragraph shall not apply to wind generators.

**1.8.2** Transmission Provider is required to pay Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from the Small Generating Facility when Transmission Provider requests Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay Interconnection Customer.

**1.8.3** Payments shall be in accordance with Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to a regional transmission organization or independent system operator FERC-approved rate schedule. To the extent that no rate schedule is in effect at the time Interconnection Customer is required to provide or absorb reactive power under this Agreement, the Parties agree to expeditiously file such rate schedule and agree to support any request for waiver of the Commission's prior notice requirement in order to compensate Interconnection Customer from the time service commenced.

**1.9** Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

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

**2.1.1** Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. Interconnection Customer shall notify Transmission Provider of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. Transmission Provider may, at Interconnection Customer's expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. Interconnection Customer shall provide Transmission Provider a written test report when such testing and inspection is completed.

**2.1.2** Transmission Provider shall provide Interconnection Customer written acknowledgment that it has received Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by Transmission Provider of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by Interconnection Customer or the quality of power produced by the Small Generating Facility.

**2.2 Authorization Required Prior to Parallel Operation**

**2.2.1** Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, Transmission Provider shall notify Interconnection Customer of any changes to these requirements as soon as they are known. Transmission Provider shall make Reasonable Efforts to cooperate with Interconnection Customer in meeting requirements necessary for Interconnection Customer to commence parallel operations by the in-service date.

**2.2.2** Interconnection Customer shall not operate its Small Generating Facility in parallel with Transmission Provider's Transmission System without prior written authorization of Transmission Provider. Transmission Provider will provide such authorization once Transmission Provider receives notification that Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

**2.3 Right of Access**

**2.3.1** Upon reasonable notice, Transmission Provider may send a qualified person to the premises of Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days



after initial start-up of the unit. In addition, Interconnection Customer shall notify Transmission Provider at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.

**2.3.2** Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, Transmission Provider shall have access to Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

**2.3.3** Each Party shall be responsible for its own costs associated with following this article.

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

#### **3.1 Effective Date**

This Agreement shall become effective upon execution by the Parties.

#### **3.2 Term of Agreement**

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### **3.3 Termination**

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination.

**3.3.1** Interconnection Customer may terminate this Agreement at any time by giving Transmission Provider 20 Business Days written notice.

**3.3.2** Transmission Provider may terminate this Agreement if the Small Generating Facility has ceased operation for three consecutive years, beginning on the last date of operation for the Small Generating Facility, after giving Interconnection Customer 20 Business Days advance written notice.

**3.3.3** Either Party may terminate this Agreement after Default pursuant to article 7.6.

**3.3.4** Upon termination of this Agreement, the Small Generating Facility will be disconnected from Transmission Provider's 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

SGIA or such non-terminating Party otherwise is responsible for these costs under this SGIA.

**3.3.5** The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

**3.3.6** The provisions of this article shall survive termination or expiration of this Agreement.

### **3.4 Temporary Disconnection**

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

#### **3.4.1 Emergency Conditions**

"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 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 the Transmission System, Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the 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 Small Generating Facility or Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. Transmission Provider shall notify Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect Interconnection Customer's operation of the Small Generating Facility. Interconnection Customer shall notify Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect Transmission Provider's Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

#### **3.4.2 Routine Maintenance, Construction, and Repair**

Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on Transmission Provider's Transmission System. Transmission Provider shall use Reasonable Efforts to provide Interconnection Customer with five Business Days notice prior to such interruption. Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with Interconnection Customer.

**3.4.3 Forced Outages**

During any forced outage, Transmission Provider may suspend interconnection service to effect immediate repairs on Transmission Provider's Transmission System. Transmission Provider shall use Reasonable Efforts to provide Interconnection Customer with prior notice. If prior notice is not given, Transmission Provider shall, upon request, provide Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

**3.4.4 Adverse Operating Effects**

Transmission Provider shall notify Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to Interconnection Customer upon request. If, after notice, Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, Transmission Provider may disconnect the Small Generating Facility. Transmission Provider shall use Reasonable Efforts to provide Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of Article 3.4.1 apply.

**3.4.5 Modification of the Small Generating Facility**

Interconnection Customer must receive written authorization from Transmission Provider before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If Interconnection Customer makes such modification without Transmission Provider's prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

**3.4.6 Reconnection**

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and Transmission Provider's Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

**Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades****4.1 Interconnection Facilities**

**4.1.1** Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. Transmission Provider shall provide a best estimate cost, including overheads, for the purchase and construction of its

Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of Interconnection Customer, such other entities, and Transmission Provider.

- 4.1.2** Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing Transmission Provider's Interconnection Facilities.

#### **4.2 Distribution Upgrades**

Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If Transmission Provider and Interconnection Customer agree, Interconnection Customer may construct Distribution Upgrades that are located on land owned by Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to Interconnection Customer.

### **Article 5. Cost Responsibility for Network Upgrades**

#### **5.1 Applicability**

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

#### **5.2 Network Upgrades**

Transmission Provider or Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If Transmission Provider and Interconnection Customer agree, Interconnection Customer may construct Network Upgrades that are located on land owned by Interconnection Customer. Unless Transmission Provider elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by Interconnection Customer.

##### **5.2.1 Repayment of Amounts Advanced for Network Upgrades**

Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to Transmission Provider and Affected System Operator, if any, for Network Upgrades, to be paid to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under Transmission Provider's Tariff or Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated at the rate for ten-year bonds posted on Bloomberg, L.P. under the United States Government Agency fair market yield curve (yield curve number 84) as in effect on the first day of the month during which Transmission Provider receives the first payment for Network Upgrades, such interest to accrue from the date of any payment for Network Upgrades through the date on which Interconnection Customer receives a repayment of such

payment pursuant to this subparagraph. Interconnection Customer may assign such repayment rights to any person.

**5.2.1.1** Notwithstanding the foregoing, Interconnection Customer, Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as Transmission Provider and said Affected System operators take one of the following actions no later than five years from the Commercial Operation Date: (1) return to Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that Transmission Provider or any applicable Affected System operators will continue to provide payments to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the commercial operation date.

**5.2.1.2** If the Small Generating Facility fails to achieve commercial operation, but it or another generating facility is later constructed and requires use of the Network Upgrades, Transmission Provider and Affected System operator shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying the entity to which reimbursement must be made.

### **5.3 Special Provisions for Affected Systems**

Unless Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, Interconnection Customer and Affected System operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by Interconnection Customer to Affected System operator as well as the repayment by Affected System operator.

### **5.4 Rights Under Other Agreements**

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

**Article 6. Billing, Payment, Milestones, and Financial Security****6.1 Billing and Payment Procedures and Final Accounting**

**6.1.1** Transmission Provider shall bill Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.

**6.1.2** Within three months of completing the construction and installation of Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, Transmission Provider shall provide Interconnection Customer with a final accounting report of any difference between (1) Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) Interconnection Customer's previous aggregate payments to Transmission Provider for such facilities or Upgrades. If Interconnection Customer's cost responsibility exceeds its previous aggregate payments, Transmission Provider shall invoice Interconnection Customer for the amount due and Interconnection Customer shall make payment to Transmission Provider within 30 calendar days. If Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, Transmission Provider shall refund to Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

**6.2 Milestones**

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

**6.3 Financial Security Arrangements**

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of Transmission Provider's Interconnection Facilities and 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. 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 and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Provider under this Agreement during its term. In addition:

- 6.3.1** 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.
- 6.3.2** The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.

## **Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

### **7.1 Assignment**

This Agreement may be assigned by either Party upon 15 Business Days prior written notice and opportunity to object by the other Party; provided that:

- 7.1.1** Either Party may assign this Agreement 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 Agreement, provided that Interconnection Customer promptly notifies Transmission Provider of any such assignment.
- 7.1.2** Interconnection Customer shall have the right to assign this Agreement, without the consent of Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that Interconnection Customer will promptly notify Transmission Provider of any such assignment.
- 7.1.3** Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

### **7.2 Limitation of Liability**

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

### **7.3 Indemnity**

Article 7.3 applies only if, at the time of the action or inaction by a Party that gave rise to the Party's right to indemnification, either Transmission Provider or Interconnection Customer was not a party to the Agreement Limiting Liability among Western Interconnected Electric Systems.

**7.3.1** This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

**7.3.2** The Parties shall at all times indemnify and hold the other Party harmless from any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

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

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

### **7.4 Consequential Damages**

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

### **7.5 Force Majeure**

**7.5.1** As used in this article, a Force Majeure Event 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 an act of negligence or intentional wrongdoing."

**7.5.2** If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## **7.6 Default**

**7.6.1** No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

**7.6.2** If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance**

**8.1** Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken

pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a small generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of Transmission Provider, except that Interconnection Customer shall show proof of insurance to Transmission Provider no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

- 8.2** The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **Article 9. Confidentiality**

- 9.1** Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.
- 9.2** Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or is otherwise required to be disclosed by law or subpoena, including the Freedom of Information Act, 5 U.S.C. § 552, as amended, or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.
- 9.2.1** Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.
- 9.2.2** Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information

without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

- 9.3** Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, 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 Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

## **Article 10. Disputes**

- 10.1** The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.
- 10.2** In the event of a dispute, 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.
- 10.3** In the event the designated representatives are unable to resolve the claim or dispute through unassisted negotiations within thirty (30) calendar days of the other Party’s receipt of the Notice of Dispute, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.
- 10.4** The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.
- 10.5** Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.
- 10.6** If neither Party elects to seek assistance from the DRS or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

**Article 11. Taxes**

- 11.1** Interconnection Customer agrees to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.
- 11.2** Transmission Provider shall cooperate with Interconnection Customer to maintain Interconnection Customer's tax status.

**Article 12. Miscellaneous****12.1 Governing Law, Regulatory Authority, and Rules**

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by federal law. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

**12.2 Amendment**

The Parties may amend this Agreement by a written instrument duly executed by both Parties.

**12.3 No Third-Party Beneficiaries**

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

**12.4 Waiver**

**12.4.1** The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

**12.4.2** Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement 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 Agreement shall, if requested, be provided in writing.

**12.5 Entire Agreement**

This Agreement, including all Attachments, 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 Agreement. 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 Agreement.

**12.6 Multiple Counterparts**

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

**12.7 No Partnership**

This Agreement 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.

**12.8 Severability**

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

**12.9 Security Arrangements**

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all Transmission Providers, market participants, and Interconnection Customers interconnected to electric systems 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 are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

**12.10 Environmental Releases**

Each Party shall remediate all releases of hazardous substances brought to, or created at, real property it owns underlying the Small Generating Facility or Interconnection Facilities, and any hazardous substances migrating from real property it owns at the Small Generating Facility site. The Party that caused the release shall bear the costs of remediation, which shall meet applicable state and Federal environmental standards at the time of the remediation. Such costs may include, but are not limited to, state and Federal supervision, remedial action plans, removal and remedial actions, and negotiation of voluntary and judicial agreements required to meet such environmental standards.

**12.10.1** Each Party shall notify the other Party as promptly as practicable of any significant release of hazardous substances by the first Party. Each Party shall cooperate with the other Party in accommodating any necessary remedial

activities of the other Party with respect to property occupied by such other Party.

- 12.10.2** The Parties agree to comply fully with the substantive requirements of all applicable Federal, state and local environmental laws in the performance of their obligations hereunder, and to mitigate and abate adverse environmental impacts accordingly.

**12.11 Subcontractors**

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

- 12.11.1** The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall Transmission Provider be liable for the actions or inactions of Interconnection Customer or its subcontractors with respect to obligations of Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 12.11.2** The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

**12.12 Reservation of Rights. Intentionally Omitted.**

**Article 13. Notices****13.1 General**

Any notice or other communication related to this Agreement, shall be in writing and deemed to have been received if delivered in person, by email, by facsimile, by First Class mail or sent by overnight delivery service at the address set out below. Either Party may change its contact information by providing notice of such change to the other Party by any of the methods listed in this section 13.1. Transmission Provider shall revise this Agreement upon such notice. Revisions made solely to change contact information may be made without additional signature by the Parties.

**To Interconnection Customer:**

Interconnection Customer  
 Customer Address  
 City, State, Zip  
 Attention: Customer Contact Name  
 Title:  
 Phone:  
 Fax:  
 Email:

**To Transmission Provider:**

Attention: Transmission Account Executive  
 for Interconnection Customer - TSE/TPP-2  
 Phone: (360) 619-6016  
 Fax: (360) 619-6940  
 Email: [txsalescontracts@bpa.gov](mailto:txsalescontracts@bpa.gov)

**First Class Mail:**

Bonneville Power Administration  
 P.O. Box 61409  
 Vancouver, WA 98666-1409

**Overnight Delivery Service:**

Bonneville Power Administration  
 905 NE 11<sup>th</sup> Avenue  
 Portland, OR 97232

**13.2 Billing and Payment**

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

**To Interconnection Customer:**

Interconnection Customer  
Customer Address  
City, State, Zip  
Attention: Customer Contact Name  
Title:  
Phone:  
Fax:  
Email:

**To Transmission Provider:**

Attention: Transmission Account  
Executive for Interconnection Customer –  
TSE/TPP-2  
Phone: (360) 619-6016  
Fax: (360) 619-6940  
Email: [txsalescontracts@bpa.gov](mailto:txsalescontracts@bpa.gov)

**First Class Mail**

Bonneville Power Administration  
P.O. Box 61409  
Vancouver, WA 98666-1409

**Overnight Delivery Service:**

Bonneville Power Administration  
905 NE 11<sup>th</sup> Avenue  
Portland, OR 97232



**13.3 Alternative Forms of Notice**

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

For any service interruptions, Emergency Conditions, operating instructions, curtailments, or dispatch orders. Transmission Provider may notify Interconnection Customer through any of the following methods: (1) by electronic signal pre-arranged between Interconnection Customer and Transmission Provider, (2) by telephone, facsimile or email to the telephone numbers and email addresses set out in Articles 13.3 or 13.4, (3) by a change request to a transaction submitted according to the NERC e-Tag protocol, or (4) as otherwise agreed between Interconnection Customer and Transmission Provider. Transmission Provider is not responsible for ensuring that Interconnection Customer has the continuous ability to receive Transmission Provider's electronic signals.

**To Interconnection Customer:**

Interconnection Customer  
Customer Address  
City, State, Zip  
Attention: Customer Contact Name  
Title:  
Phone:  
Fax:  
Email:

**To Transmission Provider:**

Attention: Transmission Account  
Executive for Interconnection Customer –  
TSE/TPP-2  
Phone: (360) 619-6016  
Fax: (360) 619-6940  
Email: [txsalescontracts@bpa.gov](mailto:txsalescontracts@bpa.gov)

**First Class Mail**

Bonneville Power Administration  
P.O. Box 61409  
Vancouver, WA 98666-1409

**Overnight Delivery Service:**

Bonneville Power Administration  
905 NE 11<sup>th</sup> Avenue  
Portland, OR 97232

**13.4 Designated Operating Representative**

Except as otherwise provided in this section, any notice, request or demand of an operating nature shall be in writing and deemed to have been received if delivered in person, by email, by facsimile, by First Class mail or sent by overnight delivery service.

For any service interruptions, emergency conditions, operating instructions, curtailments, or dispatch orders, Transmission Provider may notify Transmission Customer through any of the following methods: (1) by electronic signal pre-arranged between Transmission Customer and Transmission Provider, (2) by telephone, facsimile or email to the telephone numbers and email addresses set forth in this section, (3) by a change request to a transaction submitted according to the NERC e-Tag protocol, or (4) as otherwise agreed between Transmission Customer and Transmission Provider. Transmission Provider is not responsible for ensuring that Transmission Customer has the continuous ability to receive Transmission Provider's electronic signals.

**To Interconnection Customer:**

Interconnection Customer  
Customer Address  
City, State, Zip  
Attention: Customer Contact Name  
Title:  
Phone:  
Fax:  
Email:

**EMERGENCY ONLY**

Operations Manager for:  
Interconnection Customer  
Phone:

**To Transmission Provider:****Operational Primary:**

Munro Dispatch  
Phone: (509) 465-1820  
Fax: (509) 219-9009

**Alternate and Local Subgrid:**

Dittmer Dispatch  
Phone: (360) 418-2280 or (360) 418-2281  
Fax: (360) 418-2938

**Planned Outages:**

Dittmer Control Center  
Phone: (360) 418-2274  
Fax: (360) 418-2214

**13.5 Changes to the Notice Information**

Either Party may change its information by providing notice of such change to the other Party by any of the methods listed in section 13.1. Transmission Provider shall revise this Exhibit upon such notice. Revisions made solely to change contact information may be made without additional signatures by the Parties:

**Article 14. Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(INTERCONNECTION CUSTOMER NAME) UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
(Print/Type)

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

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

## ATTACHMENT 1 GLOSSARY OF TERMS

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

**Applicable Laws and Regulations** – 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.

**Business Day** – Monday through Friday, excluding Federal Holidays.

**Default** – The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** – 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** – The additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Good Utility Practice** – 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** – 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 the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Interconnection Customer** – Any entity, including the Transmission Provider, the Transmission Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Facilities** – The Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Request** – The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Material Modification** – A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** – Additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Provider's Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Provider's Transmission System. Network Upgrades do not include Distribution Upgrades.

**Operating Requirements** – Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or Transmission Provider's requirements, including those set forth in the Small Generator Interconnection Agreement.

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

**Point of Interconnection** – The point where the Interconnection Facilities connect with the Transmission Provider's Transmission System.

**Reasonable Efforts** – With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, 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.

**Small Generating Facility** – The Interconnection Customer's device for the production of electricity identified in the Interconnection Request. The Small Generating Facility shall be no larger than 20 MW, and shall not include the Interconnection Customer's Interconnection Facilities.

**Tariff** – The Transmission Provider or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as amended or supplemented from time to time, or any successor tariff.

**Transmission Owner** – The 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 Small Generator Interconnection Agreement to the extent necessary.

**Transmission Provider** – The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when Transmission Owner is separate from the Transmission Provider.

**Transmission System** – The facilities owned, controlled, or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.

**Upgrades** – The required additions and modifications to the Transmission Provider's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**ATTACHMENT 2****DESCRIPTION AND COSTS OF THE SMALL GENERATING FACILITY,  
INTERCONNECTION FACILITIES AND METERING EQUIPMENT**

Equipment, including the Small Generating Facility, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by Interconnection Customer, Transmission Provider, or the Transmission Owner. Transmission Provider will provide a best estimate itemized cost, including overheads, of its Interconnection Facilities and metering equipment, and a best estimate itemized cost of the annual operation and maintenance expenses associated with its Interconnection Facilities and metering equipment.

**ATTACHMENT 3**

**ONE-LINE DIAGRAM DEPICTING THE SMALL GENERATING FACILITY,  
INTERCONNECTION FACILITIES, METERING EQUIPMENT, AND UPGRADES**



**ATTACHMENT 4  
MILESTONES**

**ATTACHMENT 5**  
**ADDITIONAL OPERATING REQUIREMENTS FOR TRANSMISSION PROVIDER'S**  
**TRANSMISSION SYSTEM AND AFFECTED SYSTEMS NEEDED TO SUPPORT**  
**INTERCONNECTION CUSTOMER'S NEEDS**

Transmission Provider shall also provide requirements that must be met by Interconnection Customer prior to initiating parallel operation with Transmission Provider's Transmission System.

**ATTACHMENT 6**  
**TRANSMISSION PROVIDER'S DESCRIPTION OF ITS UPGRADES**  
**AND BEST ESTIMATE OF UPGRADE COSTS**

Transmission Provider shall describe Upgrades and provide an itemized best estimate of the cost, including overheads, of the Upgrades and annual operation and maintenance expenses associated with such Upgrades. Transmission Provider shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.

**ATTACHMENT O**

**Network Open Season Precedent Transmission Service Agreement**

**Agreement No.** \_\_\_\_\_

**[insert year] NETWORK OPEN SEASON  
PRECEDENT TRANSMISSION SERVICE AGREEMENT**

**executed by the  
UNITED STATES OF AMERICA  
DEPARTMENT OF ENERGY  
acting by and through the  
BONNEVILLE POWER ADMINISTRATION  
and  
CUSTOMER NAME**

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This PRECEDENT TRANSMISSION SERVICE AGREEMENT (PTSA or Agreement) is entered into by and between the UNITED STATES OF AMERICA, Department of Energy, acting by and through the BONNEVILLE POWER ADMINISTRATION (Bonneville), and **CUSTOMER NAME** (Customer), collectively referred to as “Parties” and individually as “Party”.

**WHEREAS**, the Customer has requested Long-Term Firm Point-to-Point (PTP) Transmission Service, or has requested the addition of a new Network Resource or new Network Load under its Network Integration (NT) Transmission Service Agreement, and has one or more eligible transmission service request(s) (TSR) pending in Bonneville’s Open Access Same-Time Information System (OASIS) queue; and

**WHEREAS**, modifications or additions to the Federal Columbia River Transmission System (FCRTS) facilities may be required before Bonneville can provide the requested PTP or NT Transmission Service; and

**WHEREAS**, Bonneville has provided notice to the Customer that it will conduct a Network Open Season process to obtain commitments for the purchase of Transmission Service, and will conduct a Cluster Study as necessary to determine the required system additions, modifications or upgrades needed in order to provide such service; and

**WHEREAS**, Bonneville will be responsible for and will conduct all studies associated with achieving compliance under the National Environmental Policy Act (NEPA), completing such studies prior to decisions related to the construction of facilities; and

**WHEREAS**, the Customer by signing this Agreement and the attached Table is committing to purchase Long-Term Firm Transmission Service from Bonneville, contingent upon Bonneville satisfying certain requirements or conditions precedent, all as specified in this Agreement.

NOW THEREFORE, the Parties do hereby enter into the following:

**1. TERM**

This Agreement, having been previously signed by Bonneville, is effective when the Customer has signed this Agreement pursuant to section 3(a) and returned it to Bonneville and has satisfied the requirements in section 3(b) and 3(e). In the event the Customer does not satisfy the requirements of sections 3(a), 3(b) and 3(e), this Agreement shall not become effective, and the status of the Customer’s TSR will be changed to ‘DECLINED.’ After the Effective Date, this Agreement shall remain in effect until the earlier of this section 1(a) or 1(b):

(a) **Termination upon Release of Performance Assurance or Service Commencement Date**

At the later of:

- (1) the release of the full amount of the Performance Assurance to the Customer pursuant to section 7(a) or 7(b); or

- (2) the Service Commencement Date for Transmission Service pursuant to section 6(b) or 6(c);

this Agreement shall terminate.

- (b) **Termination for Bonneville Failure to Satisfy Requirements or Meet Deadlines, Direct Assignment, or upon Conditions of FERC Approval**  
If any of the following occurs:

- (1) **Bonneville is Unable to Satisfy Requirements**  
Bonneville determines that it is unable to satisfy, or fails to satisfy, the requirements as described in sections 5(b)(1), or 5(d);
- (2) **Bonneville is Unable to meet Deadlines**  
Bonneville determines that it is unable to meet, or fails to meet, either of the dates specified in sections 5(e)(1). In such event, Bonneville shall notify the Customer, and no later than 15 days from the receipt of Bonneville's notice, the Customer elects to exercise its termination right in writing to Bonneville;
- (3) **Direct Assignment**  
Bonneville determines pursuant to section 5(a)(3) that costs for Expansion Facilities should be directly assigned to the Customer; or
- (4) **Conditions of FERC Approval**  
If either Party exercises its termination rights pursuant to section 10;

then this Agreement shall terminate and the Table as previously signed by the Customer shall be null and void. Bonneville shall promptly release all of the Customer's Performance Assurance and the Customer's original TSR, as existing prior to the Customer signing this Agreement, shall remain in Bonneville's long-term OASIS queue.

## 2. DEFINITIONS

Unless otherwise defined herein, capitalized terms are defined in Bonneville's Open Access Transmission Tariff (OATT), Transmission and Ancillary Service Rate Schedules and General Rate Schedule Provisions, and/or External Business Practices or Bulletins.

- (a) "Bridge" means a type of Conditional Firm Service that Bonneville offers and the Customer accepts until Transmission Service becomes available upon the energization of Expansion Facilities or upon an earlier determination by Bonneville pursuant to this Agreement.
- (b) "Cluster Study" means a process for studying a group of TSRs in the aggregate. A Cluster Study process may be used to complete a System Impact Study, System Facilities Study, NEPA analysis or other study or analysis necessary to determine system modifications required to provide Transmission Service.

- (c) “Conditional Firm Service” means a form of less-than-firm service which Bonneville may offer under a separate arrangement as a Bridge.
- (d) “Direct Assignment” or “Direct Assignment Facilities” means the facilities or portions of facilities that are constructed by Bonneville that directly benefit the Customer, and that are either: (i) not integrated with the Integrated Network, as defined in Bonneville’s General Rate Schedule Provisions, or (ii) not supporting the reliability or efficiency of the Integrated Network for the general benefit of the users of such system. The costs of such facilities may be proportionately directly assigned to the Customer.
- (e) “Effective Date” means the date this Agreement, having been previously signed by Bonneville, is signed by the Customer and returned to Bonneville pursuant to section 3(a) and the Customer has satisfied the requirements of sections 3(b) and 3(e).
- (f) “Eligible TSR” means a network TSR in the OASIS queue by 5:00 pm PDT on the date established in a notice from Bonneville pursuant to OATT section 19.10, except that a TSR is not an Eligible TSR if any of the following applies: (i) the TSR is associated with an effective PTSA, or (ii) Bonneville has determined, as of the start of the Network Open Season window stated in such notice, that it is able to provide Transmission Service for the TSR using existing system infrastructure, or (iii) the Customer requests, consistent with instructions in a notice from Bonneville, that the TSR be excluded from the Network Open Season. Eligible TSR excludes any requests on the Northwest AC Intertie, Pacific DC Intertie, and Montana Intertie.
- (g) “Expansion Facilities” means those FCRTS modifications or additions that Bonneville determines are required to provide Transmission Service to the Customer and to other Open Season Participants in aggregate.
- (h) “FERC” means the Federal Energy Regulatory Commission.
- (i) “Network Open Season” means the process Bonneville undertakes to contractually and financially secure a long-term firm commitment from customers with Eligible TSRs to purchase Transmission Service.
- (j) “Open Season Deadline” means 5:00 pm PDT on the date specified in a notice from Bonneville. Such date shall be the deadline for the Customer to comply with the requirements of section 3.
- (k) “Open Season Participant(s)” means all customers determined by Bonneville to have one or more Eligible TSRs, who sign a PTSA and the associated Table and comply with the requirements of section 3.
- (l) “Participating TSR” means any Eligible TSR for which the Customer executes a PTSA and the associated Table.

- (m) "Performance Assurance" means one of the following: (i) a Letter of Credit, (ii) a deposit into an escrow account, (iii) a cash deposit provided directly to Bonneville by the Customer, or (iv) a prepayment of Transmission Service which may be either made directly to Bonneville or to the account of Bonneville in escrow.
- (n) "Service Commencement Date" means the date as described in sections 6(b) or 6(c), on which Bonneville will start Transmission Service to the Customer.
- (o) "Service Duration" means the period of time between the Start Date and Termination Date (as defined in the Table) originally requested by the Customer in section 1(a) of the Table, unless modified in accordance with this Agreement.
- (p) "Table" means the Specifications for Long-Term Firm PTP or NT Transmission Service associated with the Customer's TSR and attached to this Agreement as Exhibit A. Upon Bonneville determination of its ability to provide Transmission Service, conformance of the Customer's TSR, and revision and signing of the Table by Bonneville, the Table will be attached to the appropriate exhibit of the Customer's Transmission Service Agreement.
- (q) "Tariff" or "OATT" means Bonneville's Open Access Transmission Tariff, dated October 2008, or its successor, unless otherwise specified herein.
- (r) "Transmission Service" means the Long-Term Firm PTP Service or NT Service requested on Bonneville's OASIS in accordance with Bonneville's OATT.

### 3. CUSTOMER REQUIREMENTS AND OPTION TO INCREASE CONTRACT TERM

- (a) **Precedent Transmission Service Agreement**  
The Customer shall be required to sign and submit a separate PTSA, including completion of Exhibit B, for each Eligible TSR in OASIS prior to the Open Season Deadline.
- (b) **Table**  
For each Eligible TSR in OASIS, the Customer shall be required to sign the Table attached to each PTSA submitted to Bonneville prior to the Open Season Deadline.
- (c) **Table and TSR Contract Term**  
The Customer may elect to increase its Service Duration as currently defined by the duration between the Start Date and the Termination Date included in the Customer's original TSR and section 1(a) of the Table. If the Customer desires to increase its Service Duration, it shall specify and initial the new Service Duration in section 1(b)(2) of the Table.



(d) **Customer Election for Requested Minimum Partial Service Demand**

If the Customer desires a minimum threshold in whole megawatts below which the Customer does not desire Bonneville to make an award of partial Transmission Service, the Customer shall fill in the minimum threshold and initial on the line in section 1(b)(3) of its Table. In the event the Customer does not make an election, Bonneville will not make any partial service awards to the Customer for less than the Customer's full requested megawatt demand. Any Bonneville offer of Conditional Firm Service will be made independently of this Customer election related to partial Transmission Service.

(e) **Performance Assurance Requirement**

Not later than the Open Season Deadline, the Customer shall provide Performance Assurance: (i) in the case of requested PTP transmission service, equal to the requested PTP Reserved Capacity times the long-term firm PTP transmission service rate in section II.A. of Bonneville's PTP rate schedule (in effect at the time of the Open Season Deadline) for one year, or, (ii) in the case of requested NT transmission service, the charge in section II.A. of Bonneville's NT rate schedule (in effect at the time of the Open Season Deadline) applied to the projected transmission service for one year. The Customer shall provide Performance Assurance in an amount in U.S. dollars by means of: (A) a Letter of Credit, (B) a security deposit into an escrow account, (C) a non-interest bearing cash security deposit with Bonneville, or (D) a prepayment of transmission service paid directly to Bonneville or to the account of Bonneville under an escrow. Each of (A) through (D) shall be established and maintained in accordance with Bonneville's Network Open Season Bulletin or its successor as in effect on the Open Season Deadline.

(1) **Attestation Statement**

Notwithstanding the foregoing, no Performance Assurance requirement will be required for the Customer's TSR if the Customer has an NT Transmission Service Agreement, the Customer's Eligible TSR is for transmission of a new Network Resource, and the Customer submits a statement attesting to the resource and generation conditions specified in section 29.2(viii) of the OATT.

(2) **Outside Counsel Opinion**

Not later than the Open Season Deadline, state and local governmental entities (including, but not limited to, municipal corporations, joint operating agencies, joint powers authorities, and utility districts) seeking to provide Performance Assurance other than a letter of credit shall provide from outside counsel selected by the Customer and reasonably acceptable to Bonneville, a legal opinion addressed to Bonneville to the effect that Bonneville's right to funds under the Performance Assurance is valid and enforceable in accordance with its terms.

#### 4. **ABILITY TO PROVIDE TRANSMISSION SERVICE WITHOUT CONSTRUCTION OF EXPANSION FACILITIES**

- (a) **Satisfaction of Customer Requirements and Determination of Ability to Provide Transmission Service without Construction of Expansion Facilities**  
After Bonneville determines that the Customer has satisfied the requirements in section 3(a), 3(b), and 3(e), Bonneville shall, on a continuing basis, determine whether it can provide Transmission Service for the Table associated with this Agreement without construction of Expansion Facilities.
- (b) **Determination of Ability to Provide Transmission Service for the Customer's Entire Demand**  
If, consistent with OASIS queue priority, Bonneville determines that it can provide Transmission Service to serve the entire transmission demand associated with the Customer's TSR without construction of Expansion Facilities, then: (i) Bonneville shall notify the Customer, (ii) shall specify the Service Commencement Date consistent with section 6(b) of this Agreement, (iii) the Customer and Bonneville shall conform the Customer's TSR pursuant to section 6(d), and (iv) Bonneville shall sign the Table.
- (c) **Determination of Ability to Provide Transmission Service for a Portion of the Customer's Demand**  
If, consistent with OASIS queue priority, Bonneville determines that it can provide Transmission Service for a portion of the Customer's requested demand equal to or exceeding the requested minimum partial demand established pursuant to section 3(d): (i) Bonneville shall notify the Customer and (ii) shall specify the Service Commencement Date consistent with section 6(b) of this Agreement. The Customer and Bonneville shall conform the Customer's TSR pursuant to section 6(d), and Bonneville shall sign the Table with such partial demand. Bonneville will prepare a new Exhibit A Table for this Agreement with the remaining transmission demand, which the Customer shall sign. Bonneville will not make a partial service award for any term less than the Service Duration requested by the Customer unless made upon agreement by the Customer.
- (d) **Determination that Construction of Expansion Facilities Is Necessary to Provide Transmission Service**  
If Bonneville determines that it is unable to provide Transmission Service for part or all of the Customer's transmission demand without construction of Expansion Facilities, section 5 shall apply to such part.
- (e) **Extensions for Commencement of Service and Treatment of Competitions under Section 17.7 of the OATT**
- (1) If, prior to the Customer's commencement of service, Bonneville releases to the Customer Reserved Capacity of another Transmission Customer pursuant to section 17.7 of the OATT, the Customer must commence

service for the Reserved Capacity in the Table without future commencement of service extensions.

- (2) If, pursuant to section 17.7 of the OATT, the Customer requests to extend the commencement of service for the Reserved Capacity in the Table and, as a result, all or part of the Customer's Reserved Capacity would need to be released in order to satisfy a competing request for Transmission Service, the Customer shall commence service for the entire Reserved Capacity in the Table on the Start Date of the competing request.

## 5. **BONNEVILLE REQUIREMENTS PRIOR TO CONSTRUCTION OF EXPANSION FACILITIES**

### (a) **Cluster Study**

#### (1) **Bonneville Obligation to Conduct Cluster Study**

In order to achieve the maximum efficiencies from its planning processes and in the identification and design of Expansion Facilities, Bonneville shall aggregate Participating TSRs and study those requests in a cluster. Such Cluster Study shall identify and design a proposed plan of service to supply the aggregate transmission needs of the Participating TSRs, and shall also identify the projected cost of any facilities and the proposed schedule to complete construction. Bonneville shall use due diligence to perform the Cluster Study or cause such study to be performed. Bonneville shall not separately charge any Cluster Study costs to Open Season Participants, except to the extent those costs may be included in Bonneville's embedded cost transmission rates and the Customer takes service under such rates.

#### (2) **Customer Obligation to Provide Information for Cluster Study**

At the time the Customer returns this signed Agreement to Bonneville, the Customer will provide Bonneville with the information required in Exhibit B for use in the Cluster Study. The Customer will provide the most current available information, and will update Bonneville in the event such information is revised. Bonneville will treat such information as confidential.

#### (3) **Direct Assignment**

All Expansion Facilities resulting from the Cluster Study are subject to a determination of Direct Assignment of costs. If Bonneville determines that costs for Expansion Facilities should be directly assigned to the Customer, then Bonneville will: (i) exclude such costs from consideration for rolled-in rate treatment under the Commercial Infrastructure Financing Proposal (CIFP) evaluation pursuant to section 5(b), (ii) notify the Customer that this Agreement shall terminate pursuant to section 1(b)(3), and (iii) process the Customer's TSR in accordance with the OATT.

- (b) **Determination of Rate Treatment Applicable to Transmission Service**  
Bonneville shall evaluate the projected cost and benefits of proposed Expansion Facilities consistent with its CIFP posted on Bonneville’s website to determine in its discretion whether Transmission Service can reasonably be provided under the applicable PTP or NT rate schedule (Bonneville’s “rolled-in” or “embedded” rate).
- (1) **Transmission Service at Rolled-in Rates**  
If Bonneville so determines that Transmission Service may be provided at rolled-in rates, Bonneville shall notify the Customer and proceed to complete its decision whether to build pursuant to section 5(d).
- (2) **Transmission Service not at Rolled-in Rates**  
If Bonneville determines that Transmission Service cannot be provided at rolled-in rates, Bonneville shall notify the Customer, this Agreement shall terminate pursuant to section 1(b)(1), and Bonneville will process the Customer’s TSR in accordance with the OATT.
- (c) **National Environmental Policy Act (NEPA) Compliance**  
Bonneville shall be responsible for all workload, including studies, as necessary to achieve its NEPA compliance associated with Expansion Facilities for TSRs for which Bonneville determines that Transmission Service may reasonably be provided at rolled-in rates. There shall be no additional compensation required of the Customer under this Agreement associated with such NEPA compliance. Bonneville reserves the absolute right to choose any alternatives considered in the NEPA process, including the no-action alternative. Nothing in this Agreement or the Table shall be construed as obligating Bonneville to choose an alternative that involves constructing facilities or to proceed with construction work under this Agreement or the Table before Bonneville has completed the NEPA review process.
- (d) **Decision to Build**  
In the event that Bonneville makes a determination pursuant to section 5(b)(1) that Transmission Service for the TSR associated with this Agreement may reasonably be provided at rolled-in rates and after completing the NEPA review pursuant to section 5(c), Bonneville will then make a determination, in its sole discretion and in accordance with the Administrator’s statutory authorities, whether to build Expansion Facilities.
- (e) **Bonneville Deadlines and Customer Option if Bonneville Requirements are not Met**  
Bonneville shall use due diligence to satisfy all of its requirements set forth in sections 5(b)(1) and 5(d).
- (1) **Bonneville Deadlines**  
The following deadlines, unless a later date is agreed to by the Customer, shall apply to Bonneville:

- (i) **Rate Treatment Deadline**  
No later than 11 months after the Open Season Deadline, Bonneville shall either: confirm the rolled-in rate treatment and notify the Customer pursuant to section 5(b)(1), or have made the Customer an offer of Conditional Firm service pursuant to section 8.
- (ii) **Decision to Build Deadline**  
No later than 39 months after the date of the notice given pursuant to section 5(b)(1), Bonneville shall either: notify the Customer pursuant to section 5(f), or have made the Customer an offer of Conditional Firm service pursuant to section 8.
- (2) **Delay in Bonneville Determinations**  
If Bonneville determines that it may not meet either the Rate Treatment or the Decision to Build deadline described in section 5(e)(1), and does not expect to make the Customer an offer of Conditional Firm service by such deadlines, Bonneville shall notify the Customer and shall specify in such notice(s) when Bonneville expects to make the determination(s) in sections 5(b)(1) or 5(d). In such case, the Customer shall have the right to terminate this Agreement pursuant to section 1(b)(2).
- (3) **Termination if Bonneville Requirements Are Not Met**  
If Bonneville cannot satisfy the requirements of either section 5(b)(1) or 5(d), Bonneville shall notify the Customer and this Agreement shall terminate pursuant to section 1(b)(1).
- (f) **Bonneville Requirements Completed; Notification of Projected Service Commencement Date**  
Upon Bonneville successfully completing its requirements pursuant to sections 5(b)(1) and 5(d), and no later than the deadlines specified in or agreed to pursuant to section 5(e): (i) Bonneville shall notify the Customer, (ii) Bonneville and the Customer shall conform the Customer's TSR, and (iii) Bonneville shall sign the Table. Such notice shall include a reasonable estimate of the Service Commencement Date, which will be after Bonneville completes construction activities required for the Expansion Facilities.

## 6. SERVICE DURATION AND COMMENCEMENT OF SERVICE

- (a) **Provisions Affecting Service Duration**
  - (1) **Conditional Firm Service**  
Any period during which the Customer has taken Conditional Firm Service as a Bridge arrangement prior to the Service Commencement Date will be applied to the Customer's Service Duration obligation.

(2) **Delay of Construction of Expansion Facilities**

If, due to delays in the construction of Expansion Facilities, the Customer's Service Commencement Date occurs subsequent to the estimated Service Commencement Date provided in Bonneville's notice pursuant to section 5(f), the Customer may elect to shorten its Service Duration by a period not exceeding the delay. The election must be upon written notice to Bonneville no later than 15 days prior to the Service Commencement Date, and excluding any coinciding period under section 6(a)(1).

(b) **Service Commencement Date if Expansion Facilities Are Not Required**

If Bonneville determines, pursuant to section 4(b) or 4(c), that it can provide Transmission Service without construction of Expansion Facilities, the actual Service Commencement Date shall be the later of:

- (1) the first day of the month occurring at least 15 days from the date of receipt by the Customer of the executed Table; or
- (2) the Start Date as originally requested by the Customer.

This Service Commencement Date will become the Start Date in the Customer's Table and the Service Commencement Date extended by the Service Duration will become the Termination Date.

(c) **Service Commencement Date if Expansion Facilities are Required**

In addition to its initial notice pursuant to section 5(f), Bonneville shall notify the Customer on a regular basis of the progress of its construction activities, and in the event of a delay, provide a revised estimate of the Service Commencement Date. The actual Service Commencement Date shall be the later of:

- (1) the first day of the month occurring at least 15 days from the date on which the Expansion Facilities are available to provide Transmission Service to the Customer, or
- (2) the Start Date as originally requested by the Customer.

The Service Commencement Date will become the Start Date in the Customer's Table and the Service Commencement Date extended by the Service Duration will become the Termination Date.

(d) **TSR Conformance**

Upon determination of the Service Commencement Date or Service Duration pursuant to sections 4(e), 6(b) or 6(c) above, Bonneville will, if necessary, provide the Customer instructions, and the Customer shall comply in modifying or 'conforming' its TSR in OASIS, and in the Table, based on the Service Commencement Date, Service Duration and any other pertinent information. The Customer and Bonneville shall thereupon initial and date section 2 of the Table, and Bonneville shall thereupon sign the Table.

## 7. DISPOSITION OF PERFORMANCE ASSURANCE

### (a) Release of Performance Assurance – Security Deposit

If the Performance Assurance is provided as a security deposit under sections 3(e)(A), 3(e)(B), or 3(e)(C) of this Agreement, Bonneville shall, within 180 calendar days following the commencement of either Transmission Service or Conditional Firm service as a Bridge arrangement, serving the full transmission demand associated with the Customer's TSR, release to the Customer the Performance Assurance provided by the Customer under section 3(e). In the event of partial demand service that is equal to or exceeds the minimum partial demand specified pursuant to section 3(d), Bonneville shall, within 180 calendar days following the commencement of either Transmission Service or Conditional Firm service as a Bridge arrangement, release to the Customer a pro-rated share of the Performance Assurance based on the ratio that the partial service in megawatts bears to the total transmission demand requested by the Customer in megawatts.

### (b) Release of Performance Assurance – Prepayment

If the Performance Assurance obligation is provided as a prepayment under section 3(e)(D) of this Agreement, each month beginning upon the commencement of either Transmission Service or Conditional Firm service as a Bridge arrangement, the Customer's obligation for services under this Agreement and the Table attached as Exhibit A will be satisfied by disbursements to Bonneville from the related escrow account or cash deposit with Bonneville. Such disbursements will continue until the total amount of the Customer's Performance Assurance balance is exhausted.

### (c) Potential Forfeiture of Performance Assurance

In the event of a material breach of this Agreement by the Customer: (i) an amount equal to the Performance Assurance shall become immediately due and payable to Bonneville, without setoff, offset or adjustment, and Bonneville shall be entitled to receive or retain any amounts provided by the Customer as Performance Assurance, and (ii) the Customer's TSR with attached Table shall be changed to 'DECLINED' status. The receipt of funds by Bonneville from Performance Assurance shall not be construed to be and is not a limitation of damages and shall not preclude Bonneville from seeking or obtaining additional damages, compensation or other remedies.

## 8. CONDITIONAL FIRM OFFER

At any time during the term of this Agreement, Bonneville may at its discretion, and consistent with OASIS queue priority, offer Conditional Firm service to the Customer. In this event, the terms of service of the Conditional Firm offer, although developed to interface with this Agreement, shall be implemented and administered independently from this Agreement. If the Customer elects not to accept a Conditional Firm offer on a TSR associated with this Agreement, Bonneville shall have no obligation to make a subsequent Conditional Firm offer. If the Customer elects to accept a Conditional Firm Service offer on a TSR associated with this Agreement, Bonneville shall unilaterally

update the TSR by means of a pen and ink change to the Table, and provide the Customer with a copy of the updated Table containing the new TSR Assign Ref Number.

**9. CREDITWORTHINESS REQUIREMENTS**

The Customer agrees to comply with Bonneville's credit support requirements throughout the term of this Agreement, as set forth in Bonneville's Creditworthiness Business Practice, as amended from time to time, and in accordance with section 11 of the OATT. Based on such credit support requirements, at the time Bonneville establishes the Service Commencement Date, Bonneville will determine whether the Customer has an obligation to post additional credit assurances.

**10. FERC APPROVAL**

Bonneville has filed with FERC certain Tariff revisions regarding the Network Open Season, including a form of PTSA that includes substantially the same terms and conditions as this Agreement. If FERC issues a final order rejecting all or any part of the Tariff revisions, or adding any conditions to the Tariff or to the form of this Agreement that are material to the Network Open Season or to this Agreement and that are unacceptable to either Party, within 30 days of issuance of FERC's final order, such Party will have the right to terminate this Agreement upon 30 days' written notice specifying the reasons for termination. Such termination shall be pursuant to section 1(b).

**11. NO DEDICATION OF FACILITIES**

No undertaking by the Customer or Bonneville under or pursuant to any provision of this Agreement shall constitute or be deemed to constitute a dedication of all or any portion of the FCRTS to the Transmission Customer or to the public.

**12. ASSIGNMENT**

The Customer shall not assign this Agreement or any of its rights hereunder unless it obtains consent in writing from Bonneville; such consent shall not be unreasonably withheld.

**13. ENTIRE AGREEMENT**

This Agreement constitutes the entire understanding between the Parties with respect to the Network Open Season, and supersedes any and all previous understanding(s) between the Parties with respect to the Network Open Season and binds and inures to the benefit of the Parties and their successors and assignees.

**14. CHOICE OF LAW**

This Agreement shall be interpreted, construed, enforced and implemented pursuant to Federal law.

**15. SECTION HEADINGS**

Section headings and subheadings appearing in this Agreement are inserted for convenience only and shall not be construed as interpretations of text.

**16. INCORPORATION OF EXHIBITS**

Exhibits A and B are hereby incorporated into and made part of this Agreement.



**17. NOTICES**

Unless otherwise specified any notice or other communication related to this Agreement, shall be in writing and shall be deemed to have been received if delivered in person, by First Class mail, by facsimile or sent by overnight delivery service.

**If to the Customer:**

*(Customer Name)*  
*(Customer Address)*  
*(Customer City, State, Zip)*  
Attention: *(Customer Contact)*  
Title: *(Customer Title)*  
Phone:  
Fax:

**If to Bonneville:**

Attention: Transmission Account Executive for  
*(Customer Name)* – TSE/TPP-2  
Phone: (360) 619-6016  
Fax: (360) 619-6940

If by First Class Mail:  
Bonneville Power Administration  
P.O. Box 61409  
Vancouver, WA 98666-1409

**If by Overnight Delivery Service:**

Bonneville Power Administration – TSE/TPP-2  
7500 NE 41<sup>st</sup> Street, Suite 130  
Vancouver, WA 98662-7905

**18. SIGNATURES**

Each Party represents that its signatory named below is duly authorized to execute this Agreement on its behalf.

**CUSTOMER NAME**

**UNITED STATES OF AMERICA**

Department of Energy  
Bonneville Power Administration

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

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

Name: \_\_\_\_\_  
*(Print/Type)*

Name: \_\_\_\_\_  
*(Print/Type)*

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

Title: Transmission Account Executive

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

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

**EXHIBIT [A or C]  
SPECIFICATIONS FOR LONG-TERM  
FIRM POINT-TO-POINT TRANSMISSION SERVICE**

**TABLE *[insert No. or letter]*  
REQUEST FOR TRANSMISSION SERVICES**

*Associated with Precedent Transmission Service Agreement No.: [insert No.]*

**1. TERM OF TRANSACTION**

**(a) Originally Specified Contract Term**

The Assign Ref is: *[insert Assign Ref]*

Start Date: at 0000 hours on *[insert date, ex. October 1, 2009]*.

Termination Date: at 0000 hours on *[insert date, ex. October 1, 2014]*.

**(b) Customer Election for Contract Term and Partial Service**

(1) Original Contract Term: *[insert term, ex. 5 years]*.

(2) Requested Contract Term: \_\_\_\_\_ *(Initial)*

*[If TSR is a Redirect, Enter: Not Applicable for a Redirect TSR on line above, remove "initial space" and remove the following paragraph]*

If the Customer desires a Contract Term longer than the Original Contract Term as specified above, the Customer may fill in and initial on the line above, in whole year increments, and not exceeding a period of 30 years. Such longer term shall retain the original Start Date specified in section 1(a) above.

(3) Requested minimum threshold for partial service: \_\_\_\_\_ *(Initial)*

If the Customer desires a minimum threshold in whole megawatts below which the Customer does not desire Bonneville to make an award of partial service, the Customer shall fill in the minimum threshold and initial on the line above.

**2. TSR CONFORMANCE**

Pursuant to section 6(d) of the Precedent Transmission Service Agreement (PTSA), Bonneville will fill in all applicable information below, based upon the Customer's original TSR, or as may be revised and described in a 'conformed' TSR submitted by the Customer. The Parties shall initial in the space provided.

The new Assign Ref is: \_\_\_\_\_ (Bonneville will insert Assign Ref or N/A)  
 Start Date at 0000 hours on: \_\_\_\_\_ (Bonneville will insert date)  
 Termination Date at 0000 hours on: \_\_\_\_\_ (Bonneville will insert date)  
 In the event of a Partial Service award: \_\_\_\_\_ (Bonneville will insert MW demand)

\_\_\_\_\_  
 Customer Initial/Date

\_\_\_\_\_  
 Bonneville Initial/Date

**3. DESCRIPTION OF CAPACITY AND ENERGY TO BE TRANSMITTED BY TRANSMISSION PROVIDER**

<b>Contract POR (Source)</b>	<b>Reservation - Scheduling (POR)</b>	<b>POR Balancing Authority</b>	<b>Contract POD (Sink)</b>	<b>Reservation - Scheduling (POD)</b>	<b>POD Balancing Authority</b>	<b>Reserved Capacity (MW)</b>

**4. POINT OF RECEIPT**

[Include Delivering Party/Resource if known]  
 Add additional PORs if necessary.

**5. POINT OF DELIVERY**

[Include Receiving Party if known]

**6. DESIGNATION OF PARTY(IES) SUBJECT TO RECIPROCAL SERVICE**

[Transmission Customer]

**7. NAMES OF ANY INTERVENING SYSTEMS PROVIDING TRANSMISSION SERVICE**

[If not applicable insert "None"]

**8. SERVICE AGREEMENT CHARGES**

Service will be subject to some combination of the charges detailed in the Service Agreement Exhibits, including but not limited to:

**(a) Transmission Charge**

PTP-08 Rate Schedule or successor rate schedules.

**(1) Reservation Fee**

Not Applicable

**(2) Short Distance Discount (SDD)**

0.6+ (0.4 x \_\_\_/75) (formula for PTP) = \_\_\_ or Not Applicable.

- (b) **Direct Assignment and Use of Facility Charges**
- (c) **Ancillary Service Charges**

## 9. OTHER PROVISIONS SPECIFIC TO THIS TABLE

### (a) **Creditworthiness**

The Customer agrees to comply with Bonneville's credit support requirements throughout the term of this Table, as set forth in Bonneville's Creditworthiness Business Practice, as amended from time to time, and in accordance with section 11 of the OATT. Based on such credit support requirements, at the time Bonneville establishes the Service Commencement Date, Bonneville will determine whether the Customer has an obligation to post additional credit assurances.

### (b) **Redirect Rights**

Bonneville agrees that changes or modifications to its ATC Methodology as used to evaluate Redirect or Network Integration Modification of Service Requests by the Customer will be subject to the notice requirements pursuant to Bonneville's Network Open Season Bulletin as effective on the Open Season Deadline.

[\[Include this section for Newpoint TSRs\]](#)

### (c) **Reservation-Scheduling POR Newpoint Conformance**

If the Customer's TSR requires the designation of Newpoint, the Customer will comply with the provisions governing Newpoint set forth in Bonneville's Requesting Transmission Service Business Practice. This includes procedures related to TSR conformance by the Customer, and at the time a valid Scheduling Point is designated, for the submittal of a Redirect Request.

[\[Include this section for the TSRs with BC.US Border \(east\) scheduling issue and intervening system scheduling path issue\]](#)

### (d) **Third Party Transmission Arrangements**

Customer shall be responsible for any scheduling arrangements on other electric systems [\[to or from\]](#) the valid Reservation-Scheduling [\[POR or POD\]](#) that may be required by such system.

**10. SIGNATURES**

Each Party represents that its signatory named below is duly authorized to execute this Table on its behalf.

**CUSTOMER NAME**

UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

Name: \_\_\_\_\_  
*(Print/Type)*

Name: \_\_\_\_\_  
*(Print/Type)*

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

Title: Transmission Account Executive

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

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

**EXHIBIT [A or C]  
SPECIFICATIONS FOR  
NETWORK INTEGRATION TRANSMISSION SERVICE**

**TABLE [insert No. or letter]  
REQUEST FOR TRANSMISSION SERVICES**

*Associated with Precedent Transmission Service Agreement No.: [insert No.]*

**1. TERM OF TRANSACTION**

**(a) Originally Specified Contract Term**

The Assign Ref is: *[insert Assign Ref]*  
 Start Date: at 0000 hours on *[insert date, ex. July 1, 2009]*.  
 Termination Date: at 0000 hours on *[insert date, ex. July 1, 2014]*.

**(b) Customer Election for Contract Term and Partial Service**

(1) Original Contract Term: *[insert term, ex. 5 years]*.

(2) Requested Contract Term: \_\_\_\_\_  
*(Initial)*

If the Customer desires a Contract Term longer than the Original Contract Term as specified above, the Customer may fill in and initial on the line above, in whole year increments, and not exceeding a period of 30 years. Such longer term shall retain the original Start Date specified in section 1(a) above.

(3) Requested minimum threshold for partial service: \_\_\_\_\_  
*(Initial)*

*[This section 1(b)(3), which is referenced in the PTSA, is not applicable to NT customers.]*

**2. TSR CONFORMANCE**

Pursuant to section 6(d) of the Precedent Transmission Service Agreement (PTSA), Bonneville will fill in all applicable information below, based upon the Customer’s original TSR, or as may be revised and described in a ‘conformed’ TSR submitted by the Customer. The Parties shall initial in the space provided.

The Assign Ref is: \_\_\_\_\_ (Bonneville will insert Assign Ref)  
 Start Date at 0000 hours on: \_\_\_\_\_ (Bonneville will insert date)  
 Termination Date at 0000 hours on: \_\_\_\_\_ (Bonneville will insert date)

Customer Initial/Date

Bonneville Initial/Date

**3. DESCRIPTION OF CAPACITY AND ENERGY TO BE TRANSMITTED BY TRANSMISSION PROVIDER**

**a. Designated Network Resources:** See Exhibit XX, Table XX, Revision No. XX, Section XX.

**b. New Designated Network Resources:**

Resource	Capacity (MW)	Start Date	Termination Date	Balancing Authority	Assign Ref

**c. Total Network Resources equals 3(a) + 3(b).**

**4. POINT OF RECEIPT**

**5. POINT OF DELIVERY**

**6. NETWORK LOAD:**

See Exhibit XX, Table XX, Revision No. XX, Section XX.

**7. DESIGNATION OF PARTY(IES) SUBJECT TO RECIPROCAL SERVICE**

See Exhibit XX, Table XX, Revision No. XX, Section XX.

**8. NAMES OF ANY INTERVENING SYSTEMS PROVIDING TRANSMISSION SERVICE**

See Exhibit XX, Table XX, Revision No. XX, Section XX.

**9. CUSTOMER SERVED LOAD**

See Exhibit XX, Table XX, Revision No. XX, Section XX.

**10. SERVICE AGREEMENT CHARGES**

Service will be subject to some combination of the charges detailed in the Service Agreement Exhibits, including but not limited to:

- (a) **Transmission Charge**  
NT-08 Rate Schedule and UFT-08 Rate Schedule or successor rate schedules.
- (b) **Direct Assignment and Use of Facility Charges**
- (c) **Ancillary Service Charges**



**11. OTHER PROVISIONS SPECIFIC TO THIS TABLE**

**(a) Creditworthiness**

The Customer agrees to comply with Bonneville’s credit support requirements throughout the term of this Table, as set forth in Bonneville’s Creditworthiness Business Practice, as amended from time to time, and in accordance with section 11 of the OATT. Based on such credit support requirements, at the time Bonneville establishes the Service Commencement Date, Bonneville will determine whether the Customer has an obligation to post additional credit assurances.

[\[Include this section for Newpoint TSRs\]](#)

**(b) Reservation-Scheduling POR Newpoint Conformance**

If the Customer’s TSR requires the designation of Newpoint, the Customer will comply with the provisions governing Newpoint set forth in Bonneville’s Requesting Transmission Service Business Practice. This includes procedures related to TSR conformance by the Customer at the time a valid Scheduling Point is designated.

[\[Include this section for the TSRs with BC.US Border \(east\) scheduling issue and intervening system scheduling path issue\]](#)

**(c) Third Party Transmission Arrangements**

Customer shall be responsible for any scheduling arrangements on other electric systems **[to or from]** the valid Reservation-Scheduling **[POR or POD]** that may be required by such system.

**12. SIGNATURES**

Each Party represents that its signatory named below is duly authorized to execute this Table on its behalf.

CUSTOMER NAME

UNITED STATES OF AMERICA  
 Department of Energy  
 Bonneville Power Administration

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

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

Name: \_\_\_\_\_  
*(Print/Type)*

Name: \_\_\_\_\_  
*(Print/Type)*

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

Title: Transmission Account Executive

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

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

**EXHIBIT B**  
**CUSTOMER INFORMATION REQUIRED FOR CLUSTER STUDY**

*Associated with Precedent Transmission Service Agreement No.09TX-00000 and with Table  
[insert No. or letter] to Exhibit [A or C] of Service Agreement No. XXXXX*

**1. SOURCE**

The Customer will identify the resource including the electrical point (i.e. substation) where the resource interconnects with a transmission system (Bonneville or other system) supplying the capacity and energy associated with the TSR.

**2. SINK**

If possible, the Customer will identify the load including the electrical point (i.e. substation) on the transmission system to be served by the resource associated with the TSR. If the load being served by the TSR cannot be specified, such as for TSRs with a POD of the Northwest HUB, the Customer must indicate whether the load will be within the Northwest or outside the Northwest.

**3. REVISIONS**

In the event information provided under this Exhibit B may be revised, the Customer will provide notice of such revisions to Bonneville by August 19, 2009. Updates will be accepted in the future, and may help inform Bonneville's final decision regarding whether to build Expansion Facilities identified by the plan of service in the Cluster Study.

**ATTACHMENT P****Oversupply Management Protocol**

This attachment establishes requirements and procedures used to moderate total dissolved gas (“TDG”) levels in the Columbia River to protect endangered fish and other aquatic species. All Transmission Customers that own or operate generating facilities in Transmission Provider’s Control Area and all generators that own or operate generating facilities in Transmission Provider’s Control Area (together referred to in this attachment as “Generator”) are subject to displacement under this attachment, including generating facilities that are dynamically scheduled out of Transmission Provider’s Control Area but not including generating facilities that are transferred out of the Control Area by pseudo-tie. Transmission Provider will deliver Federal hydroelectric energy to replace the reduced generation in order to meet the Transmission Customers’ schedules. The Oversupply Management Protocol will apply as follows:

1. Before displacing generation under this attachment, Transmission Provider will take the following actions when available and Transmission Provider determines they will reduce or avoid the need for displacement:
  - a. sales through bilateral marketing, including offering to sell power at zero cost;
  - b. waiving real power loss return obligations;
  - c. cutting prescheduled Pacific Northwest Coordination Agreement storage;
  - d. deferring scheduled generation maintenance activities;
  - e. deferring scheduled transmission maintenance activities;
  - f. increasing pumping into Banks Lake at Grand Coulee;
  - g. seeking flow reductions with BC Hydro;
  - h. seeking additional load via spill exchange agreements, such as those under hourly coordination with Mid-Columbia Hydro Projects;
  - i. seeking access to additional reservoir storage space at Federal Projects;
  - j. reducing available balancing reserves to maximize turbine flows;
  - k. selling Capacity Recallable Energy products; and
  - l. reducing TDG levels at one Federal Project by transferring spill to another Federal Project consistent with the spill priority list.
2. Transmission Provider will use a Least-Cost Displacement Cost Curve (“Cost Curve”) to displace generation located in Transmission Provider’s control area in order to moderate TDG levels in the Columbia River. The Cost Curve will list the cost of displacement for each facility. Transmission Provider will displace generation in order of cost, from the least-cost facility to the highest-cost facility, until the required displacement quantity as determined by Transmission Provider is achieved. If the highest-cost Generator that Transmission Provider displaces in an hour to achieve the required displacement quantity has

the same cost as one or more other Generators, Transmission Provider will displace all such Generators on a pro-rata basis.

- 3.a. No later than March 15 each year (or, with respect to generating facilities with a scheduled Commercial Operation Date after March 15 of any year, the later of March 15 or 30 days before the facility's scheduled Commercial Operation Date (as defined in the Large Generator Interconnection Agreement)), the Generator shall submit to an independent evaluator selected by Transmission Provider the facility's costs of displacement (\$/MWh) with respect to each of its generating facilities (other than facilities with a nameplate capacity under 3 MW, which are exempt from displacement under this attachment), the nameplate generating capacity, and supporting data and documentation for each month of the following April through March. The supporting data and documentation must be sufficient to allow the independent evaluator to verify the costs. The Generator must certify that the nameplate capacity and the costs are accurate. The submission must list costs separately for heavy load hours and for light load hours (both as defined in Transmission Provider's 2012 Power Rate Schedules or their successor) and must list both total costs of displacement and costs by each category in section 3.c. that apply to the generating facility. The Generator may submit revised costs to the independent evaluator at any time. The Generator must certify that the revised costs are accurate and must include supporting data and documentation. The revised costs for any month will be included in the Cost Curve as of the first day of the second month following submission of the costs. If a Generator does not submit the costs and supporting data and documentation, the costs of displacement of the facility shall be deemed to be \$0/MWh. If a Generator that submits the costs but does not submit supporting data and documentation later does submit supporting data and documentation, the Generator will be included in the Cost Curve as of the first day of the second month following such submission.
- b. Transmission Provider will obtain from the independent evaluator the total costs of displacement for each facility and the Cost Curve. Except as provided in section 5.a., Transmission Provider will not obtain the costs by category or any supporting data and documentation. Transmission Provider will not use the cost information for any purpose other than that specified under this attachment. In addition, Transmission Provider will not disclose the cost information to any person not employed by Transmission Provider or to any of its Marketing Function Employees, as defined by the Transmission Provider's Standards of Conduct, except that Transmission Provider may disclose the costs to the Commission as provided in section 5.a. Transmission Provider will sign, and will require the independent evaluator to sign, a nondisclosure agreement with respect to the cost information and the scheduling information the independent evaluator obtains under sections 5.a and 5.b. The nondisclosure agreement will allow the independent evaluator to disclose cost information and scheduling information to Transmission Provider under sections 5.a and 5.b.
- c. Costs of displacement shall be limited to the following:
- i. With respect to contracts for the sale of all or part of a facility's output executed on or before March 6, 2012 –

1. the production tax credit the Generator would have received under 26 U.S.C. § 45 or its successor but will not receive because of the displacement;
2. the following amounts for renewable energy credits (RECs) unbundled from the sale of power:
  - a. with respect to executed contracts for the sale of RECs unbundled from the sale of energy and executed contracts for the sale of energy and RECs in which the price for the RECs is stated separately from the price for the energy, i) the amount that the Generator is not paid by its contracting party because of its failure to deliver RECs, and ii) the amount, if any, the Generator must pay its contracting party as a penalty for its failure to deliver RECs; and
  - b. with respect to the amount of displaced generation for which the Generator has not yet executed a contract to sell the RECs, the market value of the RECs for which the Generator is not credited because of the displacement; and
3. with respect to power sales agreements for the bundled sale and purchase of both RECs and energy for a single price, i) the contract price, if the Generator is not entitled to payment for any hour in which the Generator does not generate; or, the difference between the full contract price and the reduced price if the Generator is entitled only to a reduced price for any hour in which the Generator does not generate; and ii) the amount, if any, the Generator must pay its contracting party as a penalty for its failure to generate.
  - ii. With respect to contracts for the sale of all or part of a facility's output executed after March 6, 2012, the costs listed in sections 3.c.i.1, 3.c.i.2.a.i, and 3.c.i.2.b.
4. For each hour of displacement, Transmission Provider will compensate the Generator for each displaced facility with the facility's costs of displacement (\$/MWh) multiplied by the difference between the i) MW of scheduled generation for the hour (or estimated generation submitted by behind-the-meter resources) integrated over the hour, and ii) the MW of generation that Transmission Provider has directed the Generator to reduce to under this attachment. An hour of displacement is an hour in which Transmission Provider has directed the Generator to reduce generation under this Attachment and Generator has complied with the direction, including hours in which the Generator is ramping down to comply with the direction or ramping up to return to normal operations.
- 5.a. The independent evaluator may validate costs submitted by the Generator. In such case the Generator will submit to the independent evaluator any additional supporting data the independent evaluator reasonably requests. If the independent evaluator determines that any costs warrant further review, it may provide the cost information including supporting data and documentation to Transmission Provider. In such case, Transmission Provider and Generator will follow the Dispute Resolution Procedures set forth in section 12 of this Tariff. If the dispute is not resolved, Transmission Provider may file a complaint or other appropriate request with the Commission requesting review of the costs and appropriate action if any.

- b. If Transmission Provider believes that any schedule submitted during an hour of displacement may be inaccurate or inflated, Transmission Provider may ask the independent evaluator to review the schedule, and may submit additional data to the independent evaluator to consider in its evaluation. In such case the independent evaluator may ask the Generator to provide relevant supporting data for the schedule, which Generator shall provide. The independent evaluator will provide to Transmission Provider its conclusion regarding the accuracy of the schedule. If the independent evaluator concludes that the schedule is inaccurate or inflated, it may provide to Transmission Provider the data provided by the Generator. In such case, Transmission Provider and Generator will follow the Dispute Resolution Procedures set forth in section 12 of this Tariff. If the dispute is not resolved, Transmission Provider may file a request or complaint with the Commission, together with the scheduling data, requesting investigation of the Generator's scheduling practices and appropriate action if any.
6. Transmission Provider shall establish in a business practice the communication protocols through which Transmission Provider will notify Generators when Transmission Provider implements this attachment.
  7. If a Generator is prevented from reducing generation below a certain level or deviating from a certain ramp rate, the Generator may submit a minimum generation level or a maximum ramp rate to Transmission Provider under Transmission Provider's minimum generation business practice. Transmission Provider will not direct a Generator to reduce generation below its minimum generation level, or at a ramp rate that exceeds the maximum ramp rate. If a Generator does not submit a minimum generation level or a maximum ramp rate, Transmission Provider may direct the Generator to reduce generation to zero. Generators may consider the following factors in establishing minimum generation levels and ramp rates:
    - i. Generation level required for self- or third-party supply of Ancillary Services such as operating reserves, regulating and load following reserves, or for supply of Ancillary Services to another Control Area;
    - ii. Generation levels needed for local reactive power support;
    - iii. Generation levels that can be achieved within 60 minutes or that allow return to normal operation within 60 minutes;
    - iv. Generation levels required for compliance with environmental laws and regulations;
    - v. Minimum stable and safe generation levels;
    - vi. Minimum fuel take obligations;
    - vii. Maximum 10-minute ramp rates;
    - viii. Maximum duration for reduced generation levels; and
    - ix. Generation levels and duration for testing requirements after generator maintenance.
    - x. Generation level needed to support plant operations associated with co-generation facilities.

8. Transmission Provider will not charge or compensate the Generator for generator imbalance service under Transmission Provider's applicable generation imbalance rate schedules in any hour in which Transmission Provider directed the Generator to reduce generation below the amount of generation scheduled under this attachment.
9. Generator shall remain responsible for loss return and Operating Reserve obligations incurred for schedules submitted for hours in which Transmission Provider implements this attachment.
10. Transmission Provider shall post on its website an annual report stating the MWh of energy displaced and the cost of displacement pursuant to this attachment.

**ATTACHMENT Q****Energy Imbalance Market****1. General Provision - Purpose and Effective Date of Attachment Q**

Attachment Q provides for Transmission Provider's participation as the BPA EIM Entity in the EIM administered by the MO. Sections 4.1.5, 4.1.6, 8, 10.1 and 10.4 of this Attachment Q take effect on the date the EIM goes live in the BPA BAA, or the implementation date of Transmission Provider's participation in the EIM, whichever is later. All other sections of this Attachment Q take effect no earlier than seven (7) days prior to the start of parallel operations.

This Attachment Q shall apply to all Transmission Customers and GI Customers, as applicable, with new and existing service agreements under Attachments A, F, L and N of this Tariff. To the extent a GI Customer controls the output of a generator located in BPA's BAA, the BPA EIM Entity may require the GI Customer to comply with a requirement in this Attachment Q that on its face applies to a Transmission Customer to the extent that the BPA EIM Entity makes a determination, in its sole discretion, that the GI Customer is the more appropriate party to satisfy the requirements of Attachment Q than any Transmission Customer.

This Attachment Q shall work in concert with the provisions of the MO Tariff implementing the EIM to support operation of the EIM. To the extent that this Attachment Q is inconsistent with a provision in the remainder of this Tariff with regard to the BPA EIM Entity's administration of the EIM, this Attachment Q shall prevail.

This Attachment Q governs the relationship between the BPA EIM Entity and all Transmission Customers and GI Customers subject to this Tariff. This Attachment Q does not establish privity between Transmission Customers and the MO or make a Transmission Customer subject to the MO Tariff. Any Transmission Customer duties and obligations related to the EIM are those identified in this Tariff, unless the Transmission Customer voluntarily elects to participate directly in the EIM with BPA EIM Participating Resources, in which case the MO Tariff provisions for EIM Participating Resources and EIM Participating Resource Scheduling Coordinators shall also apply.

**2. Election of Transmission Customers to become BPA EIM Participating Resources**

The decision of a Transmission Customer to participate in the EIM with resources as BPA EIM Participating Resources is voluntary. A Transmission Customer that chooses to have a resource become a BPA EIM Participating Resource must:

- (1) Meet the requirements specified in Section 3 of this Attachment Q and the BPA EIM BP;
- (2) Become or retain a MO-certified EIM Participating Resource Scheduling Coordinator; and
- (3) Follow the application and certification process specified in this Attachment Q and the BPA EIM BP posted on the Transmission Provider's OASIS.



- (4) Transmission Customers which own, control, or market multiple resources may elect to have any or all of their resources be BPA EIM Participating Resources, in which case any resources that the Transmission Customer does not elect to be BPA EIM Participating Resources shall be treated as Non-Participating Resources for purposes of this Attachment Q.

### **3. Eligibility to be a BPA EIM Participating Resource**

#### **3.1 Internal Resources - Transmission Rights**

Resources owned, controlled, or marketed by Transmission Customers and located within the metered boundaries of BPA's BAA are eligible to become BPA EIM Participating Resources. The Transmission Customer that owns, controls, or markets the resource must have associated transmission rights based on one of the following:

- (1) The resource is a designated Network Resource of a Network Customer and the Network Customer elects to participate in the EIM through its Network Integration Transmission Service Agreement; or
- (2) The resource is associated with a Service Agreement for Point-to-Point Transmission Service.

#### **3.2 Resources External to BPA's BAA**

##### **3.2.1 Use of Pseudo-Ties**

A resource owned or controlled by a Transmission Customer that is not physically located inside the metered boundaries of BPA's BAA may participate in the EIM as a BPA EIM Participating Resource if the Transmission Customer (1) implements a Pseudo-Tie into BPA's BAA, consistent with BPA's business practice posted on Transmission Provider's OASIS, (2) has arranged firm transmission over any third-party transmission systems to a BPA BAA intertie boundary equal to the amount of energy that will be Dynamically Transferred through a Pseudo-Tie into BPA's BAA, consistent with BPA's business practice posted on Transmission Provider's OASIS, and (3) has secured transmission service consistent with Section 3.1 of this Attachment Q.

##### **3.2.2 Pseudo-Tie Costs**

Pseudo-Tie implementation costs shall be allocated in a manner consistent with the treatment of Network Upgrades and Direct Assignment Facilities to facilitate a Pseudo-Tie into BPA's BAA.

### **3.3 Application and Certification of BPA EIM Participating Resources**

#### **3.3.1 Application**

To register a resource to become a BPA EIM Participating Resource, a Transmission Customer must submit a completed application, as set forth in the BPA EIM BP, and shall provide an application fee as specified in the BPA EIM BP for the BPA EIM Entity to process the application. At the time of application, any BPA EIM Participating Resource applicant must

elect to perform the duties of either a CAISO Metered Entity or Scheduling Coordinator Metered Entity, consistent with the MO's requirements and additional technical requirements set forth in the BPA EIM BP, as applicable.

### **3.3.2 Processing the Application**

The BPA EIM Entity shall make a determination as to whether to accept or reject the application within 45 days of receipt of the application. At minimum, the BPA EIM Entity shall validate through the application that the Transmission Customer has satisfied Sections 3.1 and 3.2 of this Attachment Q, as applicable, and met minimum telemetry and metering requirements, as set forth in the MO's requirements and the BPA EIM BP. Within 45 days of receipt of the application and in accordance with the process outlined in the BPA EIM BP, the BPA EIM Entity may request additional information and will attempt to resolve any minor deficiencies in the application with the Transmission Customer. The BPA EIM Entity may extend the 45-day period to accommodate the resolution of minor deficiencies in the application in order to make a determination on an application. If the BPA EIM Entity approves the application, it shall send notification of approval to both the Transmission Customer and the MO. The process by which the BPA EIM Entity sends notification of approval shall be set forth in the BPA EIM BP. If the BPA EIM Entity rejects the application, the BPA EIM Entity shall send notification stating the grounds for rejection to the Transmission Customer. Upon request, the BPA EIM Entity may provide guidance to the applicant as to how the Transmission Customer may cure the grounds for the rejection. If the BPA EIM Entity has granted an extension of the 45-day period but the Transmission Customer has neither provided the additional requested information nor otherwise resolved identified deficiencies within six (6) months of the BPA EIM Entity's initial receipt of the application, the application shall be deemed rejected by the BPA EIM Entity. If an application is rejected, the Transmission Customer may resubmit its application at any time (including submission of a new processing fee deposit).

### **3.3.3 Certification Notice**

After the BPA EIM Entity has approved Transmission Customer's application, the BPA EIM Entity shall certify the Transmission Customer's BPA EIM Participating Resource to participate in the EIM in accordance with the BPA EIM BP once the Transmission Customer has demonstrated and the MO has confirmed that the Transmission Customer has:

- (1) Met the MO's criteria to become an EIM Participating Resource and executed the MO's EIM Participating Resource Agreement;
- (2) Qualified to become an EIM Participating Resource Scheduling Coordinator and have executed the MO's Meter Service Agreement for Scheduling Coordinators, or retained the services of a MO-certified EIM Participating Resource Scheduling Coordinator that has executed the MO's Meter Service Agreement for Scheduling Coordinators;
- (3) Met the necessary metering requirements of this Tariff and Section 29.10 of the MO Tariff; and

- (4) Met communication and data requirements of this Tariff and Section 29.6 of the MO Tariff; and has the ability to receive and implement the MO's Dispatch Instructions every five minutes.

Upon receiving notice from the MO of the completion of the enumerated requirements by the Transmission Customer, the BPA EIM Entity shall provide written notice to both the Transmission Customer with a BPA EIM Participating Resource and the MO that the BPA EIM Participating Resource is certified and therefore eligible to participate in the EIM. The process by which the BPA EIM Entity certifies Transmission Customers with a BPA EIM Participating Resource shall be set forth in the BPA EIM BP.

### **3.3.4 Status of Resource Pending Certification**

If the Transmission Customer (i) has submitted an application for a resource to be a BPA EIM Participating Resource but the application has not been approved, or (ii) has not yet been certified by the BPA EIM Entity consistent with Section 3.3.3 of this Attachment Q, the resource shall be deemed to be a Non-Participating Resource.

### **3.3.5 Notice and Obligation to Report a Change in Information**

Each Transmission Customer with a BPA EIM Participating Resource has an ongoing obligation to inform the BPA EIM Entity of any changes to any of the information submitted as part of the application process under this Attachment Q. The BPA EIM BP shall set forth the process and timing requirements for notifying the BPA EIM Entity of such changes.

This information includes, but is not limited to:

- (1) Any change in the BPA EIM Participating Resource Scheduling Coordinator representing the resource;
- (2) Any change in the ownership or control of the resource;
- (3) Any change to the physical characteristics of the resource required to be reported to the MO in accordance with Section 29.4(c)(4)(C) of the MO Tariff; or
- (4) If either the MO terminates the participation of the BPA EIM Participating Resource in the EIM or the Transmission Customer has terminated the BPA EIM Participating Resource's participation in the EIM; in either case, that resource shall be considered to be a Non-Participating Resource for purposes of this Tariff, including Attachment Q.

## **4. Roles and Responsibilities**

### **4.1 Transmission Provider as the BPA EIM Entity and the BPA EIM Entity Scheduling Coordinator**

#### **4.1.1 Responsibilities**

##### **4.1.1.1 Identification of EIM Entity Scheduling Coordinator**

The BPA EIM Entity can serve as the BPA EIM Entity Scheduling Coordinator or retain a third party to perform such role. If the BPA EIM Entity is not the BPA EIM Entity Scheduling Coordinator, the BPA EIM Entity shall communicate to the BPA EIM Entity Scheduling Coordinator the information required by the BPA EIM Entity Scheduling Coordinator to fulfill its responsibilities in the EIM.

The BPA EIM Entity Scheduling Coordinator shall coordinate and facilitate the EIM in accordance with the requirements of the MO Tariff. The BPA EIM Entity Scheduling Coordinator must meet the certification requirements of the MO and enter into any necessary MO agreements.

##### **4.1.1.2 Processing BPA EIM Participating Resource Applications**

The BPA EIM Entity shall be responsible for processing applications of Transmission Customers seeking authorization to participate in the EIM with resources as BPA EIM Participating Resources in accordance with Section 3.3 of this Attachment Q.

##### **4.1.1.3 Determination of EIM Implementation Decisions for BPA's BAA**

The BPA EIM Entity is solely responsible for making any decisions with respect to EIM participation that the MO requires of EIM Entities. The BPA EIM Entity has made the following determinations:

- (1) Eligibility requirements for BPA EIM Participating Resources are set forth in Section 3 of Attachment Q.
- (2) Load Aggregation Points (LAP): There shall be one LAP for BPA's BAA.
- (3) Load forecast: The BPA EIM Entity shall be permitted to use the MO load forecast, but shall retain the right to provide the load forecast to the MO in accordance with the MO Tariff.
- (4) MO metering agreements: The BPA EIM Entity and all Transmission Customers with BPA EIM Participating Resources shall have the option to elect to be Scheduling Coordinator Metered Entities or CAISO Metered Entities in accordance with Section 29.10 of the MO Tariff. The BPA EIM Entity shall be a Scheduling Coordinator Metered Entity on behalf of all Transmission Customers

with Non-Participating Resources in accordance with Section 29.10 of the MO Tariff.

#### **4.1.1.4 BPA EIM Business Practice**

The BPA EIM Entity shall establish and revise, as necessary, procedures to facilitate implementation and operation of the EIM through the BPA EIM BP that shall be posted on the Transmission Provider's OASIS.

#### **4.1.1.5 Determination to Take Corrective Actions or Permanently Terminate Participation in the EIM**

The BPA EIM Entity may take corrective actions in BPA's BAA in accordance with the requirements of Section 10.3 of Attachment Q.

In addition, the BPA EIM Entity, in its sole and absolute discretion, may permanently terminate its participation in the EIM by providing notice of termination to the MO pursuant to applicable agreements.

#### **4.1.2 Responsibilities of the BPA EIM Entity to Provide Required Information**

##### **4.1.2.1 Provide Modeling Data to the MO**

The BPA EIM Entity shall provide the MO information associated with transmission facilities within BPA's BAA, including, but not limited to, network constraints and associated limits that must be observed in BPA's BAA network and interties with other BAAs.

##### **4.1.2.2 Registration**

The BPA EIM Entity shall register all Non-Participating Resources with the MO. The BPA EIM Entity may choose to obtain default energy bids from the MO for Non-Participating Resources that are Balancing Authority Area Resources. The BPA EIM Entity shall update this information in accordance with the MO's requirements as revised information is received from Transmission Customers with Non-Participating Resources in accordance with Section 4.2.1.2 of this Attachment Q.

#### **4.1.3 Day-to-Day EIM Operations**

##### **4.1.3.1 Submission of Transmission Customer Base Schedule, Forecast Data for Non-Participating Resources that are Variable Energy Resources, and Resource Plans**

The BPA EIM Entity is responsible for providing the data required by the MO in accordance with Section 29.34 of the MO Tariff, including but not limited to: (1) hourly Transmission Customer Base Schedules; (2) Forecast Data for Non-Participating Resources that are Variable Energy Resources; and (3) Resource Plans.

#### **4.1.3.2 Communication of Manual Dispatch Information**

The BPA EIM Entity shall inform the MO of a Manual Dispatch by providing adjustment information for the affected resources in accordance with Section 29 of the MO Tariff.

#### **4.1.3.3 Confirmation**

The MO shall calculate, and the BPA EIM Entity shall confirm, actual values for Dynamic Schedules reflecting EIM Transfers to the MO within 60 minutes after completion of the Operating Hour to ensure the e-Tag author will be able to update these values in accordance with WECC criteria through an update to the e-Tag.

#### **4.1.3.4 Dispatch of EIM Available Balancing Capacity of a Non-Participating Resource**

Upon notification by the MO, the BPA EIM Entity shall notify the Non-Participating Resource of the Dispatch Operating Point for any EIM Available Balancing Capacity from the Non-Participating Resource, except in circumstances in which the BPA EIM Entity determines the additional capacity is not needed for the BAA or has taken other actions to meet the capacity need.

#### **4.1.4 Provision of Meter Data**

The BPA EIM Entity shall submit load, resource, and Interchange meter data to the MO in accordance with the format and timeframes required in the MO Tariff on behalf of Transmission Customers with Non-Participating Resources, loads, and Interchange.

#### **4.1.5 Settlement of MO Charges and Payments**

For information pertaining to Settlement of MO Charges and Payments refer to the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

#### **4.1.6 Dispute Resolution with the MO**

The BPA EIM Entity shall manage dispute resolution with the MO for the BPA EIM Entity settlement statements consistent with Section 29.13 of the MO Tariff, Section 12 of this Tariff, and the BPA EIM BP. Transmission Customers with BPA EIM Participating Resources shall manage dispute resolution with the MO for any settlement statements they receive directly from the MO.

### **4.2 Transmission Customer Responsibilities**

The following must comply with the information requirements of this section: (1) Transmission Customers with a BPA EIM Participating Resource; (2) Transmission Customers with a Non-Participating Resource; (3) Transmission Customers with load within BPA's BAA; and (4) subject to the limitations identified in Section 4.2.4.5.1 of this Attachment Q, Transmission Customers wheeling through BPA's BAA.

#### **4.2.1 Initial Registration Data**

##### **4.2.1.1 Transmission Customers with a BPA EIM Participating Resource**

A Transmission Customer with a BPA EIM Participating Resource shall provide the MO and the BPA EIM Entity with data necessary to meet the requirements established by the MO to register all resources with the MO as required by Section 29.4(e)(4)(D) of the MO Tariff.

##### **4.2.1.2 Transmission Customers with Non-Participating Resources**

A Transmission Customer with Non-Participating Resources shall provide the BPA EIM Entity with data necessary to meet the requirements established by the MO as required by Section 29.4(c)(4)(C) of the MO Tariff.

#### **4.2.2 Responsibility to Update Required Data**

##### **4.2.2.1 Transmission Customers with a BPA EIM Participating Resource**

Each Transmission Customer with a BPA EIM Participating Resource has an ongoing obligation to inform the MO and BPA EIM Entity of any changes to any of the information submitted by the Transmission Customer provided under Section 4.2.1 of this Attachment Q that reflects changes in operating characteristics as required by Section 29.4(e)(4)(D) of the MO Tariff. The BPA EIM BP shall set forth the process and timing requirements of notifying the BPA EIM Entity of such changes.

##### **4.2.2.2 Transmission Customers with Non-Participating Resources**

Each Transmission Customer with a Non-Participating Resource has an ongoing obligation to inform the BPA EIM Entity of any changes to any of the information submitted by the Transmission Customer with a Non-Participating Resource provided under Section 4.2.1 of this Attachment Q. The BPA EIM BP shall set forth the process and timing requirements of notifying the BPA EIM Entity of such changes.

#### **4.2.3 Outages**

Transmission Customers with BPA EIM Participating Resources and Transmission Customers with Non-Participating Resources shall be required to provide planned and unplanned outage information for their resources in accordance with Section 7 of this Attachment Q. The BPA Outage Planning and Coordination Policy shall set forth the outage information requirements for BPA EIM Participating Resources and Non-Participating Resources.

#### **4.2.4 Submission of Transmission Customer Base Schedule**

A Transmission Customer shall submit the Transmission Customer Base Schedule to the BPA EIM Entity. This submission must include Forecast Data on all resources, Interchange, and Intrachange which balance to the Transmission Customer's anticipated load, as applicable. If the Transmission Customer does not serve load within BPA's BAA, submission of the Transmission Customer Base Schedule shall include Forecast Data on all resources, Interchange, and

Intrachange which shall balance to the Transmission Customer's anticipated actual generation within BPA's BAA. The submissions shall be in the format and within the timing requirements established by the MO and the BPA EIM Entity as required in Section 4.2.4.5 of this Attachment Q and the BPA EIM BP.

#### **4.2.4.1 Transmission Customers with a BPA EIM Participating Resource or Non-Participating Resource in the BPA BAA**

A Transmission Customer with a BPA EIM Participating Resource or a Non-Participating Resource is not required to submit Forecast Data for:

- (1) resources located in BPA's BAA that are less than three MW and not included in the MO's network model; or
- (2) behind-the-meter generation which is not contained in the MO's network model.

Each BPA EIM Participating Resource Scheduling Coordinator shall provide to the BPA EIM Entity the energy bid range data (without price information) of the respective resources it represents that are participating in the EIM.

Each BPA EIM Participating Resource Scheduling Coordinator shall also provide the BPA EIM Entity with Dispatch Operating Point data of the respective resources it represents that are participating in the EIM.

#### **4.2.4.2 Transmission Customers with Non-Participating Resources that are Variable Energy Resources**

The BPA EIM Entity shall provide its Variable Energy Resource Forecast to the MO showing: (i) resource Forecast Data with hourly granularity and (ii) resource Forecast Data with 5-minute or 15-minute granularity. A Transmission Customer with a Non-Participating Resource that is a Variable Energy Resource shall submit its Transmission Customer Base Schedule to the BPA EIM Entity. If a Transmission Customer Base Schedule is less accurate than it would have been had it used the BPA EIM Entity's Variable Energy Resource Forecast, then there may be additional charges under BPA's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions.

#### **4.2.4.3 Transmission Customers with Load**

As set forth in Sections 4.2.4 of this Attachment Q, a Transmission Customer is required to submit Forecast Data on all resources, Interchange, and Intrachange which balance to the Transmission Customer's anticipated load, as applicable. The BPA EIM Entity shall calculate the load component of the Transmission Customer Base Schedule as the resource Forecast Data net of its Interchange Forecast Data and net of its Intrachange Forecast Data, as applicable.

#### **4.2.4.4 Transmission Customers Without Resources or Load in BPA's BAA**

A Transmission Customer which does not have any resources or load within BPA's BAA shall submit a Transmission Customer Base Schedule that includes Interchange and Intrachange



Forecast Data to the BPA EIM Entity.

#### **4.2.4.5 Timing of Transmission Customer Base Schedules Submission**

##### **4.2.4.5.1 Preliminary Submission of Transmission Customer Base Schedules by Transmission Customers with Resources Or Load in the BPA BAA.**

Transmission Customers with resources or load in the BPA BAA shall submit their initial Transmission Customer Base Schedules to the BPA EIM Entity 7 days prior to each Operating Day (“T - 7 days”). Transmission Customers may modify the proposed Transmission Customer Base Schedule at any time but shall submit at least one update to the BPA EIM Entity by 10 a.m. of the day before the Operating Day.

##### **4.2.4.5.2 Final Submissions of Transmission Customer Base Schedules**

Transmission Customers shall submit proposed final Transmission Customer Base Schedules to the BPA EIM Entity no later than 77 minutes prior to each Operating Hour (“T-77”). Transmission Customers may modify Transmission Customer Base Schedules up to and until 57 minutes prior to the Operating Hour (“T-57”). As of 55 minutes prior to each Operating Hour (“T-55”), the Transmission Customer Base Schedule data for the Operating Hour is financially binding and Transmission Customers may not submit further changes without incurring financial settlements. If the Transmission Customer fails to enter a Forecast Data value, the default will be 0 MW for that Operating Hour.

#### **4.2.5 Metering for Transmission Customers with Non-Participating Resources**

To assess imbalance, the MO shall disaggregate meter data into 5-minute intervals if the meter intervals are not already programmed to 5-minute intervals pursuant to a Transmission Customer’s applicable interconnection requirements associated with any agreement pursuant to Attachments L and N of this Tariff. To the extent that a Transmission Customer owns the meter or communication to the meter, the Transmission Customer shall be responsible to maintain accurate and timely data accessible for the BPA EIM Entity to comply with Section 4.1.4 of this Attachment Q.

### **5. Transmission Operations**

#### **5.1 Provision of Information Regarding Real-Time Status of the Transmission Provider’s Transmission System**

The BPA EIM Entity shall provide the MO information on:

- (1) real time data for the Transmission System and interties; and
- (2) any changes to transmission capacity and the Transmission System due to operational circumstances.

#### **5.2 Provision of EIM Transfer Capacity by a BPA Interchange Rights Holder**

The BPA EIM Entity shall facilitate the provision of transmission capacity for EIM Transfers

that source or sink in the BPA EIM Entity BAA offered by a BPA Interchange Rights Holder by providing the MO with information about the amounts made available by the BPA Interchange Rights Holder for EIM Transfers. The provision of EIM Transfer capacity shall be implemented through the BPA Interchange Rights Holder's submission of a Transmission Service Request on an EIM transfer path. At 77 minutes prior to the Operating Hour ("T-77") the BPA EIM Entity shall retrieve all approved Transmission Service Requests on all EIM transfer paths that source or sink in the BPA EIM Entity BAA.

By T-75 the BPA EIM Entity shall submit or update an e-Tag for each EIM transfer path that sources or sinks in the BPA EIM Entity BAA for which a BPA Interchange Rights Holder has donated transmission and communicate the effective transfer limits to the EIM. The BPA Interchange Rights Holder's rights associated with the submitted e-Tag shall be available for the EIM, subject to approval of the e-Tag by all required e-Tag approval entities. The amount of transmission made available for EIM Transfers shall never exceed that which is donated by BPA Interchange Rights Holders.

## **6. System Operations Under Normal and Emergency Conditions**

### **6.1 Compliance with Reliability Standards**

Participation in the EIM shall not modify, change, or otherwise alter the manner in which the Transmission Provider operates its Transmission System consistent with applicable reliability standards, including adjustments.

Participation in the EIM shall not modify, change, or otherwise alter the obligations of the BPA EIM Entity, Transmission Customers with BPA EIM Participating Resources, or Transmission Customers with Non-Participating Resources to comply with applicable reliability standards.

The BPA EIM Entity shall remain responsible for:

- (1) maintaining appropriate operating reserves and for its obligations pursuant to any reserve sharing group agreements;
- (2) NERC and WECC responsibilities including, but not limited to, informing the Reliability Coordinator of issues within BPA's BAA;
- (3) processing e-Tags and managing schedule curtailments at the interties; and
- (4) monitoring and managing real-time flows within system operating limits on all transmission facilities within BPA's BAA, including facilities of BPA BAA Transmission Owners. If requested by a Transmission Customer that is also a BPA BAA Transmission Owner, the BPA EIM Entity will provide additional information or data related to EIM operation as it may relate to facilities of a BPA BAA Transmission Owner.

### **6.2 Good Utility Practice**

The BPA EIM Entity, Transmission Customers with Non-Participating Resources, and Transmission Customers with BPA EIM Participating Resources shall comply with Good Utility

Practice with respect to this Attachment Q.

### **6.3 Management of Contingencies and Emergencies**

#### **6.3.1 EIM Disruption**

If the MO declares an EIM disruption in accordance with Section 29.7(j) of the MO Tariff, the BPA EIM Entity shall, in accordance with Section 29.7(j)(4) of the MO Tariff, promptly inform the MO of actions taken in response to the EIM disruption by providing adjustment information, updates to e-Tags, transmission limit adjustments, or outage and de-rate information, as applicable.

#### **6.3.2 Manual Dispatch**

The BPA EIM Entity may issue a Manual Dispatch order to a Transmission Customer with a BPA EIM Participating Resource or a Non-Participating Resource in BPA's BAA, to address reliability or operational issues in BPA's BAA that the EIM is not able to address through normal economic dispatch and congestion management.

The BPA EIM Entity shall inform the MO of a Manual Dispatch as soon as possible.

## **7. Outages**

### **7.1 BPA EIM Entity Transmission Outages**

#### **7.1.1 Planned Transmission Outages and Known Derates**

The BPA EIM Entity shall submit information regarding planned transmission outages and known derates to the MO's outage management system in accordance with Section 29.9(b) of the MO Tariff and the BPA Outage Planning and Coordination Policy. The BPA EIM Entity shall update the submittal if there are changes to the transmission outage plan.

#### **7.1.2 Unplanned Transmission Outages**

The BPA EIM Entity shall submit information as soon as possible regarding unplanned transmission outages or derates to the MO's outage management system in accordance with Section 29.9(e) of the MO Tariff and the BPA Outage Planning and Coordination Policy.

### **7.2 BPA BAA Transmission Owner Outages**

Transmission Customers that are also BPA BAA Transmission Owners shall provide the BPA EIM Entity with planned and unplanned transmission outage data. Planned outages shall be reported to the BPA EIM Entity according to the timelines in BPA's Outage Planning and Coordination Policy. Unplanned outages shall be reported to the BPA EIM Entity as soon as practicable but shall also be reported according to the BPA's Outage Planning and Coordination Policy.

The BPA EIM Entity shall communicate information regarding planned and unplanned outages

of BPA BAA Transmission Owner facilities to the MO as soon as practicable upon receipt of the information from the BPA BAA Transmission Owner.

### **7.3 BPA EIM Participating Resource Outages**

#### **7.3.1 Planned BPA EIM Participating Resource Outages and Known Derates**

BPA EIM Participating Resource Scheduling Coordinators shall submit information regarding planned resource outages and known derates to the BPA EIM Entity. Planned outages and known derates shall be reported to the BPA EIM Entity according to BPA's Outage Planning and Coordination Policy. The BPA EIM Entity shall then submit this outage information to the MO's outage management system in accordance with Section 29.9(c) of the MO Tariff and the BPA Outage Planning and Coordination Policy. BPA EIM Participating Resource Scheduling Coordinators shall update the submittal if there are changes to the resource outage plan according to the timelines in BPA's Outage Planning and Coordination Policy.

#### **7.3.2 Unplanned BPA EIM Participating Resource Outages**

In the event of an unplanned outage required to be reported under Section 29.9(e) of the MO Tariff, the BPA EIM Participating Resource Scheduling Coordinator is responsible for notifying the BPA EIM Entity of required changes. Unplanned outages shall be reported to the BPA EIM Entity as soon as practicable but shall also be reported according to the BPA's Outage Planning and Coordination Policy. The BPA EIM Entity shall then submit this information to the MO's outage management system.

#### **7.3.3 Unplanned Derates BPA EIM Participating Resources**

Changes in availability of 10 MW or 5% of Pmax (whichever is greater) lasting 15 minutes or longer must be reported to the BPA EIM Entity. These reports are due within 30 minutes of discovery, and are required only to include effective time and MW availability. The BPA EIM Entity shall then submit this information to the MO's outage management system.

### **7.4 Outages of Transmission Customers with Non-Participating Resources**

#### **7.4.1 Planned Outages and Known Derates of Transmission Customers with Non-Participating Resources**

Transmission Customers with Non-Participating Resources shall report information regarding planned outages and known derates of resources to the BPA EIM Entity according to the BPA's Outage Planning and Coordination Policy. The Transmission Customer with a Non-Participating Resource shall update the submittal if there are changes to the resource's outage plan according to the BPA's Outage Planning and Coordination Policy.

The BPA EIM Entity shall submit planned resource outages and known derates of Non-Participating Resources to the MO's outage management system in accordance Section 29.9(c) of the MO Tariff and according to BPA's Outage Planning and Coordination Policy.

#### **7.4.2 Unplanned Outages and Derates of Resources of Transmission Customers with Non-Participating Resources**

Unplanned outages of resources of a Transmission Customer with Non-Participating Resources shall be reported to the BPA EIM Entity as soon as practicable but shall also be reported according to the BPA's Outage Planning and Coordination Policy. The BPA EIM Entity shall then submit this information to the MO's outage management system.

### **8. EIM Settlements and Billing**

Transmission Customers and GI Customers subject to this Attachment Q shall be assessed Energy Imbalance Market Services and Rates pursuant to the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

#### **8.1 EIM Payment Calendar**

Pursuant to Section 29.11(1) of the MO Tariff, the BPA EIM Entity shall be subject to the MO's payment calendar for issuing settlement statements, exchanging invoice funds, submitting meter data, and submitting settlement disputes to the MO. The BPA EIM Entity shall follow Section 7 of this Tariff, Billing and Payment, for issuing invoices regarding the EIM.

#### **8.2 Market Validation and Price Correction**

If the MO modifies the BPA EIM Entity settlement statement in accordance with the MO's market validation and price correction procedures in the MO Tariff, the BPA EIM Entity reserves the right to make corresponding or similar changes to the charges and payments sub-allocated under the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

### **9. Compliance**

#### **9.1 Provision of Data**

Transmission Customers with BPA EIM Participating Resources and BPA EIM Participating Resource Scheduling Coordinators must comply with information requests they receive directly from the EIM market monitor or regulatory authorities with competent jurisdiction over the Transmission Customer concerning EIM activities.

A Transmission Customer with BPA EIM Participating Resources or a Transmission Customer with Non-Participating Resources must provide the BPA EIM Entity with all data necessary to respond to information requests received by the BPA EIM Entity from the MO, the EIM market monitor, or regulatory authorities that have jurisdiction over BPA and that concern EIM activities.

If the BPA EIM Entity is required by applicable laws or regulations, or in the course of administrative or judicial proceedings, to disclose information that is otherwise required to be maintained in confidence, the BPA EIM Entity may disclose such information; provided,

however, that upon the BPA EIM Entity learning of the disclosure requirement and, if possible, prior to making such disclosure, the BPA EIM Entity shall notify any affected party of the requirement and the terms thereof. The affected party will have the opportunity to object to disclosure and the information will be withheld if permitted by law. Except for information required to be released under the Freedom of Information Act, 5 U.S.C. § 552, as amended, the BPA EIM Entity shall cooperate with the affected party to obtain proprietary or confidential treatment of confidential information by the person to whom such information is disclosed prior to any such disclosure.

The BPA EIM Entity shall treat all Transmission Customer and GI Customer data and information provided to it as market-sensitive and confidential, unless the BPA EIM Entity is otherwise allowed or required to disclose. The BPA EIM Entity shall continue to abide by the Standards of Conduct under section 4 of the body of the Tariff and handle customer information accordingly.

## **9.2 Rules of Conduct**

These rules of conduct are intended to provide fair notice of the conduct expected and to provide an environment in which all parties may participate in the EIM on a fair and equal basis.

Transmission Customers must:

- (1) Comply with Dispatch Instructions and BPA EIM Entity operating orders in accordance with Good Utility Practice. If some limitation prevents the Transmission Customer from fulfilling the action requested by the MO or the BPA EIM Entity, the Transmission Customer must immediately and directly communicate the nature of any such limitation to the BPA EIM Entity;
- (2) Submit bids for resources that are reasonably expected to both be and remain available and capable of performing at the levels specified in the bid, based on all information that is known or should have been known at the time of submission;
- (3) Notify the MO and/or the BPA EIM Entity, as applicable, of outages in accordance with Section 7 of this Attachment Q;
- (4) Provide complete, accurate, and timely meter data to the BPA EIM Entity in accordance with the metering and communication requirements of this Tariff, and maintain responsibility to ensure the accuracy of such data communicated by any customer-owned metering or communications systems. To the extent such information is not accurate or timely when provided to the BPA EIM Entity, the Transmission Customer shall be responsible for any consequence on settlement and billing;
- (5) Provide information to the BPA EIM Entity, including the information requested in Sections 4.2.1, 4.2.2, 4.2.3, 4.2.4 and 9.1 of this Attachment Q, by the applicable deadlines; and
- (6) Utilize commercially-reasonable efforts to ensure that forecasts are accurate and based on all information that is known or should have been known at the time of submission to the BPA EIM Entity.

### **9.3 Enforcement**

The BPA EIM Entity may refer a violation of Section 9.2 of this Attachment to the CAISO Department of Market Monitoring or FERC. Nothing in this Section 9 is meant to limit the BPA EIM Entity from pursuing any other remedy available to it.

## **10. Market Contingencies**

### **10.1 Temporary Suspension by the MO**

In the event that the MO implements a temporary suspension in accordance with Section 29.1(d)(1) of the MO Tariff, including the actions identified in Section 29.1(d)(5), temporary schedules shall be utilized in accordance with the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor in accordance with Sections 10.4.1 and 10.4.2 of this Attachment Q until the temporary suspension is no longer in effect or, if the MO determines to extend the suspension, for a period of time sufficient to process termination of the BPA EIM Entity's participation in the EIM in accordance with Section 29.1(d)(2) of the MO Tariff.

### **10.2 Termination of Participation in EIM by the BPA EIM Entity**

If the BPA EIM Entity submits a notice of termination of its participation in the EIM to the MO in accordance with the applicable agreements and Section 4.1.1.5 of this Attachment Q, in order to mitigate price exposure during the 180-day period between submission of the notice and the termination effective date, the BPA EIM Entity may invoke the following corrective actions by requesting that the MO:

- (1) prevent EIM Transfers and separate the BPA EIM Entity's BAA from operation of the EIM in the EIM Area; and
- (2) suspend settlement of EIM charges with respect to the BPA EIM Entity. Once such corrective actions are implemented by the MO, the BPA EIM Entity shall utilize temporary schedules in accordance with the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

If the BPA EIM Entity takes action under this Section 10.2, the BPA EIM Entity shall notify the MO and Transmission Customers.

### **10.3 Corrective Actions Taken by the BPA EIM Entity for Temporary Contingencies**

The BPA EIM Entity may declare a temporary contingency and invoke corrective actions for the EIM when in its judgment -

- (1) operational circumstances (including a failure of the EIM to produce feasible results in BPA's BAA) have caused or are in danger of causing an abnormal system condition in BPA's BAA that requires immediate action to prevent loss of load, equipment damage, or tripping system elements that might result in

- cascading outages, or to restore system operation to meet the applicable Reliability Standards and reliability criteria established by NERC and WECC; or
- (2) communications between the MO and the BPA EIM Entity are disrupted and prevent the BPA EIM Entity, the BPA EIM Entity Scheduling Coordinator, or a BPA EIM Participating Resource Scheduling Coordinator from accessing MO systems to submit or receive information.

### **10.3.1 Corrective Actions for Temporary Contingencies**

If either of the above temporary contingencies occurs, the BPA EIM Entity may take corrective actions as it deems appropriate or it may invoke the following corrective actions by requesting that the MO:

- (1) prevent EIM Transfers and separate the BPA EIM Entity's BAA from operation of the EIM in the EIM Area; and/or
- (2) suspend settlement of EIM charges with respect to the BPA EIM Entity.

When corrective action under only 10.3.1(1) is implemented, and the MO requests an alternative price under Section 29.7(j)(2)(D) of the MO Tariff, the Transmission Provider shall request that the MO settle EIM charges at the rate for temporary contingences in accordance with the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor. When corrective action under 10.3.1 (2) is implemented or if the MO Tariff requires the use of temporary schedules, the Transmission Provider will utilize temporary schedules in accordance with the Transmission Provider's Transmission, Ancillary, and Control Area Service Rate Schedules and General Rate Schedule Provisions, or its successor.

If the BPA EIM Entity takes action under this Section 10.3, the BPA EIM Entity shall notify the MO and Transmission Customers. The BPA EIM Entity and the MO shall cooperate to resolve the temporary contingency event and restore full EIM operations as soon as is practicable.

## **10.4 Temporary Schedules 4, 9**

### **10.4.1 Temporary Schedule 4 Energy Imbalance Service**

Schedule 4, Energy Imbalance Service, is the Temporary Schedule 4.

### **10.4.2 Temporary Schedule 9 Generator Imbalance Service**

Schedule 9, Generator Imbalance Service, is the Temporary Schedule 9.



**ATTACHMENT R**

**Large Generator Interconnection Transition Process**

**including**

**Large Generator Interconnection Agreement for  
Non-Clustered Transition Requests (LGIA)**

## Large Generator Interconnection Transition Process

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Appendix 1: Interconnection Request for a Large Generating Facility (Transition Request)

Appendix 2: Late-Stage Interconnection Facilities Study Agreement

Appendix 3: Phase One Cluster Study Agreement

Appendix 4: Phase Two Cluster Study Agreement

Appendix 5: Interconnection Facilities Study Agreement

Appendix 6: Standard Large Generator Interconnection Agreement for Non-Clustered Transition Requests (LGIA)

## **Section 1. Scope and Application of Attachment R**

### **1.1 Scope of Transition Process**

All Transition Projects will be processed under this Attachment R. This Attachment R shall not apply to (a) any Interconnection Requests that have completed all interconnection studies (Feasibility Study (if applicable), System Impact Study, and Interconnection Facilities Study) by June 30, 2024; or (b) any Interconnection Requests for which Interconnection Customer has executed an Standard Large Generator Interconnection Agreement (LGIA) under the LGIP by June 30, 2024. Interconnection Requests that are out of scope for the Transition Process under (a) and (b) of this section are not eligible for Scalable Plan Blocks and cost sharing of Network Upgrades and will not be subject to a Withdrawal Charge under Section 3.7 of the LGIP.

After the Transition Close Date, Transmission Provider shall only accept new Interconnection Requests within a Cluster Request Window specified in Section 4 of the LGIP. Consistent with Section 4 of the LGIP, new Interconnection Requests submitted outside of the Cluster Request Window are not valid and will not receive consideration.

### **1.2 Relationship to LGIP**

Except as otherwise provided in, or modified by, this Attachment R, Sections 3-15 of the LGIP as outlined in Attachment L of the Tariff shall apply to Transition Requests. Any references made to the LGIA in this Attachment R are to the LGIA in Appendix 6 of this Attachment R unless otherwise indicated. For purposes of the LGIA in Appendix 6, references to the "LGIP" in the LGIA are to the LGIP included in Transmission Provider's Tariff prior to June 30, 2024. To the extent there are any conflicts or inconsistencies between this Attachment R and the LGIA, Attachment R controls.

### **1.3 Defined Terms**

Unless otherwise indicated in this Attachment R, capitalized terms used in this Attachment R shall have the meanings set forth in the LGIP.

**Interconnection System Impact Study** shall mean an engineering study performed before the effective date of this Attachment R 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 Standard Large Generator Interconnection Procedures.

**Late-Stage Interconnection Facilities Study** shall mean a study conducted by Transmission Provider or a third party consultant for Interconnection Customer to determine a list of facilities (including Transmission Provider's Interconnection Facilities 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 Transmission Provider's Transmission System. The scope of the study is defined in Section 4.4 of this Attachment R.

**Late-Stage Project** shall mean a Transition Project that, (1) as of June 30, 2024, is at or beyond the point in the interconnection process when the Transition Project has an issued System Impact Study Report; or (2) meets the criteria for fast track eligibility according to Section 1.4.2 of this Attachment R.

**Standard Large Generator Interconnection Procedures (LGIP)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are included in Transmission Provider's Tariff

**Transition Close Date** shall be November 22, 2023.

**Transition Cluster Study** shall mean the procedures set forth in this Attachment R by which Transmission Provider will evaluate Transition Projects in a Transition Cluster Study or Transition Cluster Re-Study.

**Transition Cluster Re-Study** shall mean a re-study of a Transition Cluster Study conducted pursuant to Sections 3.4 and 3.7 of this Attachment R.

**Transition Process** shall mean Transmission Provider's method to study Interconnection Requests that are received by the Transition Close Date and have met all of the applicable requirements in Attachment R by the close of the Transition Request Window.

**Transition Projects** shall mean any Interconnection Customer that has submitted a complete Interconnection Request from a Large Generating Facility subject to study under the LGIP, received by Transmission Provider by the Transition Close Date. Transition Projects shall not include any Interconnection Request(s) for which Interconnection Customer has executed an LGIA under the LGIP prior to June 30, 2024.

**Transition Request** shall mean the written request in the form of Appendix 1 of this Attachment R submitted by an Interconnection Customer for a Transition Project pursuant to Sections 1.4.1, 1.4.2, or 2.1 to opt into the Transition Process.

**Transition Request Window** shall mean the period in which Transmission Provider will accept Transition Requests. The Transition Request Window shall open on June 30, 2024 and close ninety (90) Calendar Days after the open of the Transition Request Window.

## **1.4 Transition Process Eligibility**

### **1.4.1 Late-Stage Projects Eligibility Requirements**

If an Interconnection Customer meets the requirements to be a Late-Stage Project, Interconnection Customer may either:

- (a) elect to continue through the remaining Interconnection Facilities Study and interconnection agreement execution phases of this Attachment R by submitting a Transition Request to Transmission

Provider in the form of Appendix 1 of this Attachment R for Large Generating Facility Interconnection Requests. Late-Stage Projects that meet the requirements in this section of Attachment R shall not be subject to Sections 4-7 of the LGIP; or

- (b) opt into the Transition Cluster Study process performed under Section 3 of this Attachment R by submitting a Transition Request to Transmission Provider in the form of Appendix 1 of this Attachment R for Large Generating Facility Interconnection Requests.

Interconnection Customer for a Late-Stage Project that elects to continue through the remaining Interconnection Facilities Study and interconnection agreement execution phases of Attachment R (i.e., elect not to join the Transition Cluster Study) pursuant to Section 1.4.1(a), must provide to Transmission Provider no later than the close of the Transition Request Window: (1) a demonstration of Site Control pursuant to Section 2.1.1 of this Attachment R, (2) a demonstration of a Commercial Readiness Milestone Option pursuant to 2.1.2 of this Attachment R, and (3) submit a Transition Request to Transmission Provider in the form of Appendix 1 of this Attachment R indicating its decision to continue through the remaining Interconnection Facilities Study and interconnection agreement execution phases of this Attachment R. These demonstrations with the accompanying Transition Request for a Late-Stage Project must be made by the close of the Transition Request Window. Late-Stage Projects that continue through the remaining Interconnection Facilities Study and interconnection agreement execution phases of Attachment R shall maintain the queue position pursuant to 5.1 of this Attachment R of Interconnection Customer's original request.

Interconnection Customer with a Late-Stage Project that opts into the Transition Cluster Study process pursuant to Section 1.4.1(b) must submit a Transition Request to Transmission Provider by the close of the Transition Request Window described in this Attachment R. Transition Requests must meet the requirements in Section 2. Interconnection Customer with a Late-Stage Project that submits a Transition Request electing to opt into the Transition Cluster Study process shall forfeit any previous interconnection study results. Transmission Provider will terminate any existing interconnection study agreements, or previously tendered but unexecuted LGIA under the LGIP prior to June 30, 2024, and the request will be processed under the Transition Cluster Study.

#### **1.4.2 Fast Track Eligibility Requirements**

If an Interconnection Customer meets all of the following requirements, Interconnection Customer may request Transmission Provider to evaluate the Transition Request for eligibility as a Late-Stage Project by submitting no later than the Transition Request Window: (1) a Transition

Request to Transmission Provider in the form of Appendix 1 of this Attachment R for Large Generating Facility Interconnection Requests, (2) a demonstration of Site Control pursuant to Section 2.1.1 of this Attachment R, and (3) a demonstration of a Commercial Readiness Milestone Option pursuant to 2.1.2 of this Attachment R, for Late-Stage Projects. If an Interconnection Customer applying for Fast Track Eligibility wants to be considered for the Transition Cluster Study, in the case where Transmission Provider determines the Interconnection Request is not eligible, Interconnection Customer must make this election in the Transition Request submitted to Transmission Provider in the form of Appendix 1 of this Attachment R.

- (a) Interconnection Customer's Interconnection Request either (1) does not need any Network Upgrades, or (2) the scope of Network Upgrades is limited to upgrades at the point of interconnection and generally on the scale of a bay addition required, or less. Anticipated costs for these types of upgrades would be \$5M or less, but eligibility will be determined upon Transmission Provider's sole discretion and based primarily on simplicity of the required scope of work;
- (b) During the Transition Request Window, Interconnection Customer has submitted their completed study results identifying plans of service that are consistent with the requirements above for evaluation and decision by Transmission Provider;
- (c) Interconnection Customer's Interconnection Request has no impact on an Affected System;
- (d) Interconnection Customer has received an interconnection study and report and has no pending re-study or report revisions needed for the Interconnection Request;
- (e) The Interconnection Request has no impact to other Interconnection Requests in the queue; and
- (f) The Interconnection Request does not require contingent or shared Network Upgrades.

#### **1.4.3 Transition Cluster Eligibility Requirements**

If an Interconnection Customer meets the requirements to be a Transition Project, Interconnection Customer may request Transmission Provider to evaluate the Transition Request for inclusion in the Transition Cluster by submitting no later than the close of the Transition Request Window: (1) a Transition Request to Transmission Provider in the form of Appendix 1 of this Attachment R for Large Generating Facility Interconnection Requests, (2) a demonstration of Site Control pursuant to Section 2.1.1 of this Attachment R, and (3) a demonstration of a Commercial

Readiness Milestone Option pursuant to 2.1.2 of this Attachment R, for Transition Cluster Study Projects.

## **Section 2. Processing of Transition Requests**

### **2.1 Site Control and Commercial Readiness Requirements**

To be eligible for inclusion in the Transition Process, an Interconnection Customer with a Transition Project must submit a Transition Request in the form of Appendix 1 of this Attachment R for Large Generating Facilities no later than the close of the Transition Request Window and must satisfy the requirements of this Section 2.1 no later than the close of the Transition Request Window. A Transition Request will not be considered to be a valid request until all items in this Section 2.1 have been received by Transmission Provider. If an Interconnection Request fails to adhere to the requirements set forth in this Section 2.1, the Interconnection Request shall be deemed withdrawn in accordance with Section 3.7 of the LGIP.

#### **2.1.1 Site Control**

Interconnection Customers with Transition Requests for Large Generating Facilities shall demonstrate exclusive Site Control for the Generating Facility in a form reasonably acceptable to Transmission Provider, in accordance with Section 3.4.1 of the LGIP.

#### **2.1.2 Commercial Readiness**

During the Transition Request Window, each Interconnection Customer with Transition Requests must submit one of the following Commercial Readiness Milestone Options totaling the requested Interconnection Service amount, where applicable, to Transmission Provider no later than the close of the Transition Request Window.

- (a) Executed term sheet (or comparable evidence) related to a contract for sale, where the term of the sale is not less than five (5) years, for (i) the constructed Generating Facility, (ii) the Generating Facility's energy or capacity, or (iii) the Generating Facility's Ancillary Services;
- (b) Documentation from a Load-Serving Entity, commercial, industrial, large end-use customer, competitive retail supplier, power marketer, or other wholesale buyer of active negotiations (or the equivalent, e.g. for an ongoing relationship) for purchase of the output of Interconnection Customer's Large Generating Facility. Interconnection Customer shall provide documentation that they continue to meet Commercial Readiness by providing evidence of another Commercial Readiness Milestone (e.g., executed term sheet under Section 2.1.2(a) of this Attachment R) to Transmission Provider by: (1) for Late-Stage Projects, one hundred twenty (120) days after Interconnection Customer has been issued an



Interconnection Facilities Study Report or (2) for Transition Projects in the Transition Cluster Study, during the Phase Two Customer Review Period;

- (c) Executed contract binding upon the parties for sale to a Load-Serving Entity, competitive retail supplier, power marketer, other wholesale buyer, or a commercial, industrial, or large end-use customer for:
  - (i) the constructed Generating Facility, (ii) the Generating Facility's energy or capacity where the term of sale is not less than five (5) years, or (iii) the Generating Facility's Ancillary Services if the Generating Facility is an electric storage resource where the term of sale is not less than five (5) years;
- (d) Reasonable evidence that the Generating Facility has been selected by or for a Load-Serving Entity in a Resource Plan or is on the final shortlist for a Resource Solicitation Process by or for a Load-Serving Entity, if such a plan or final short list has been approved or acknowledged by the applicable authority (including for an Investor-Owned Utility its state utility commission, as applicable);
- (e) Site specific purchase order for Generating and/or Interconnection Facilities equipment specific to the Queue Position;
- (f) Documentation from Interconnection Customer of reasonable evidence of transmission service reservation (or comparable evidence) for the Generating Facility. Transmission Provider in its sole discretion may evaluate individual facts and circumstances of reasonable evidence of transmission service that originates from the Point of Interconnection, such as: a confirmed Long-Term firm transmission service reservation, confirmed Long-Term conditional firm transmission service reservation with roll over rights, designation of a Network Resource (DNR), a long-term confirmed redirect, or a Long-Term firm transmission service offer that will be confirmed following a transmission expansion project that has been securitized; or,
- (g) In lieu of submitting evidence of a Commercial Readiness Milestone as specified above in Section 2.1.2(a)-(f) of this Attachment R, Interconnection Customer shall provide a Commercial Readiness Deposit, made in the form of a cash deposit, irrevocable letter of credit, or deposit into an escrow account that is established by Interconnection Customer as specified below in Section 2.1.2(g)(i)-(ii) of this Attachment R. Transmission Provider will refund the Commercial Readiness Deposit to Interconnection Customer according to Sections 13.3.2 and 13.3.3 of the LGIP.

- i. For Late-Stage Projects, prior to the close of the Transition Request Window, a Commercial Readiness Deposit equal to one hundred percent (100%) of an Interconnection Customer's allocated interconnection facility and Network Upgrade costs identified in the System Impact Study report.
  - ii. For Transition Project entering the Transition Cluster Study, prior to the close of the Transition Request Window, a Commercial Readiness Deposit equal to \$6,000 per MW of total requested Interconnection Service amount.
- (h) If Interconnection Customer's Commercial Readiness Milestone demonstration as specified in Section 2.1.2(a)-(f) of this Attachment R does not meet the total requested Interconnection Service amount where applicable, Interconnection Customer shall supplement their Commercial Readiness Milestone with a Commercial Readiness Deposit in Section 2.1.2(g) of this Attachment R that is reduced by a percentage based on the amount already demonstrated.

### **2.1.3 Acknowledgement of Transition Requests**

Transmission Provider shall acknowledge receipt of the Transition Request within five (5) Business Days of receipt of the request and attach a copy of the received Transition Request to the acknowledgement. Transmission Provider may opt to validate a request before the close of the Transition Request Window.

### **2.1.4 Ineligible Requests**

If Interconnection Customer fails to meet the requirements under Section 1 and Section 2 of this Attachment R, Transmission Provider shall notify Interconnection Customer within twenty (20) Business Days of receipt of the Transition Request of the reasons for such failure and that the Transition Request does not constitute a valid request and Interconnection Customer's original Interconnection Request would be deemed withdrawn in accordance with Section 3.7 of the LGIP; and any existing Interconnection Agreements (e.g., System Impact Study, Interconnection Facilities Study) would be terminated in accordance with Section 13 of the LGIP.

### **2.1.5 Existing Interconnection Study Agreements**

Notwithstanding Section 1.4.1 of this Attachment R, Interconnection Customer with a Transition Request that has satisfied the requirements to continue into the Transition Cluster Study process pursuant to Section 2.1 of this Attachment R will be issued new Cluster Study agreements pursuant to Section 3.1 of this Attachment R. Transmission Provider will terminate any existing interconnection study agreements.

**Section 3. Transition Cluster Study Process****3.1 Customer Engagement Window and Phase One Cluster Study Agreement**

Thirty-five (35) Business Days after the close of the Transition Request Window, Transmission Provider will open a forty-five (45) Calendar Day Customer Engagement Window in accordance with Section 6.2 of the LGIP.

All Interconnection Customers with Transition Requests that meet the requirements of Section 2 of this Attachment R and that have executed a Phase One Cluster Study Agreement, in the form of Appendix 3 of this Attachment R, and submitted a Phase One Cluster Study deposit by the end of the Customer Engagement Window shall be included in that Transition Cluster Study. If Interconnection Customer with a Transition Project fails to meet these requirements by the end of the Customer Engagement Window, Interconnection Customer will be deemed withdrawn and subject to Section 3.7 of the LGIP.

**3.2 Phase One Cluster Study**

Transmission Provider shall conduct a Phase One Cluster Study in accordance with Section 6 of the LGIP, except that Section 6.6.1 of the LGIP shall not apply. Commercial Readiness Milestone Options applicable to the Phase One Cluster Study conducted pursuant to this Attachment R are set forth below in Section 3.2.1.

**3.2.1 Commercial Readiness**

An Interconnection Customer with a Transition Request in the Transition Cluster wishing to proceed to a Phase Two Cluster Study must submit one of the following Commercial Readiness Milestone Options totaling the requested Interconnection Service amount, where applicable, to Transmission Provider no later than the completion of the Customer Review Period following the Phase One Cluster Study.

- (a) Executed term sheet (or comparable evidence) related to a contract for sale, where the term of the sale is not less than five (5) years, for
  - (i) the constructed Generating Facility, (ii) the Generating Facility's energy or capacity, or (iii) the Generating Facility's Ancillary Services;
- (b) Documentation from a Load-Serving Entity, commercial, industrial, large end-use customer, competitive retail supplier, power marketer, or other wholesale buyer of active negotiations (or the equivalent, e.g. for an ongoing relationship) for purchase of the output of Interconnection Customer's Large Generating Facility. During the Phase Two Customer Review Period, Interconnection Customer shall provide documentation that they continue to meet commercial readiness by providing evidence of another Commercial Readiness Milestone (e.g., executed term sheet under Section 3.2.1(a) of this

Attachment R) for Transition Requests in the Transition Cluster Study;

- (c) Executed contract binding upon the parties for sale to a Load-Serving Entity, competitive retail supplier, power marketer, other wholesale buyer, or a commercial, industrial, or large end-use customer for: (i) the constructed Generating Facility, (ii) the Generating Facility's energy or capacity where the term of sale is not less than five (5) years, or (iii) the Generating Facility's Ancillary Services if the Generating Facility is an electric storage resource where the term of sale is not less than five (5) years;
- (d) Reasonable evidence that the Generating Facility has been selected by or for a Load-Serving Entity in a Resource Plan or is on the final shortlist for a Resource Solicitation Process by or for a Load-Serving Entity, if such a plan or final short list has been approved or acknowledged by the applicable authority (including for an Investor-Owned Utility its state utility commission, as applicable);
- (e) Site specific purchase order for Generating and/or Interconnection Facilities equipment specific to the Queue Position;
- (f) Documentation from Interconnection Customer of reasonable evidence of transmission service reservation (or comparable evidence) for the Generating Facility. Transmission Provider in its sole discretion may evaluate individual facts and circumstances of reasonable evidence of transmission service that originates from the Point of Interconnection, such as: a confirmed Long-Term firm transmission service reservation, confirmed Long-Term conditional firm transmission service reservation with roll over rights, designation of a Network Resource (DNR), a long-term confirmed redirect, or a Long-Term firm transmission service offer that will be confirmed following a transmission expansion project that has been securitized; or,
- (g) In lieu of submitting evidence of a Commercial Readiness Milestone as specified above in Section 3.2.1(a)-(f) of this Attachment R, a Commercial Readiness Deposit equal to ten percent (10%) of the Network Upgrade costs allocated to Interconnection Customer in the Phase One Cluster Study report less any amounts already paid as a Commercial Readiness Deposit during the Transition Request Window under Section 2.1.2(g)(ii) of this Attachment R. Interconnection Customer shall provide the Commercial Readiness Deposit in the form of a cash deposit, irrevocable letter of credit, or deposit into an escrow account that is established by Interconnection Customer. Transmission Provider will refund the Commercial

Readiness Deposit to Interconnection Customer according to Sections 13.3.2 and 13.3.3 of the LGIP.

- (h) If Interconnection Customer's Commercial Readiness Milestone demonstration as specified in Section 3.2.1(a)-(f) of this Attachment R does not meet the total requested Interconnection Service amount where applicable, Interconnection Customer shall supplement their Commercial Readiness Milestone with a Commercial Readiness Deposit in Section 3.2.1(g) that is reduced by a percentage based on the amount already demonstrated.

### **3.3 Phase Two Cluster Study**

At the completion of the final Phase One Cluster Study Customer Review Period following the Phase One Cluster Study process, Interconnection Customers that timely submitted a valid Phase Two Cluster Study Agreement, in the form of Appendix 4 of this Attachment R, Phase Two Cluster Study deposit, and validated detailed modeling data shall proceed to the Phase Two Cluster Study.

Transmission Provider shall conduct a Phase Two Cluster Study in accordance with Section 7 of the LGIP, except that Section 7.5.1 shall not apply.

Commercial Readiness Milestone Options applicable to the Phase Two Customer Review Period pursuant to this Attachment R are set forth below in Section 3.3.1.

#### **3.3.1 Commercial Readiness**

An Interconnection Customer with a Transition Request in the Transition Cluster wishing to proceed to an Interconnection Facilities Study must submit one of the following Commercial Readiness Milestone Options totaling the requested Interconnection Service amount, where applicable, to Transmission Provider no later than the completion of the Customer Review Period following the Phase Two Cluster Study.

- (a) Executed term sheet (or comparable evidence) related to a contract for sale, where the term of the sale is not less than five (5) years, for (i) the constructed Generating Facility, (ii) the Generating Facility's energy or capacity, or (iii) the Generating Facility's Ancillary Services; where the term of sale is not less than five (5) years;
- (b) Executed contract binding upon the parties for sale to a Load-Serving Entity, competitive retail supplier, power marketer, other wholesale buyer, or a commercial, industrial, or large end-use customer for: (i) the constructed Generating Facility, (ii) the Generating Facility's energy or capacity where the term of sale is not less than five (5) years, or (iii) the Generating Facility's Ancillary Services if the Generating Facility is an electric storage resource where the term of sale is not less than five (5) years;

- (c) Reasonable evidence that the Generating Facility has been selected by or for a Load-Serving Entity in a Resource Plan or is on the final shortlist for a Resource Solicitation Process by or for a Load-Serving Entity, if such a plan or final short list has been approved or acknowledged by the applicable authority (including for an Investor-Owned Utility its state utility commission, as applicable);
- (d) Site specific purchase order for Generating and/or Interconnection Facilities equipment specific to the Queue Position
- (e) Documentation from Interconnection Customer of reasonable evidence of transmission service reservation (or comparable evidence) for the Generating Facility. Transmission Provider in its sole discretion may evaluate individual facts and circumstances of reasonable evidence of transmission service that originates from the Point of Interconnection, such as: a confirmed Long-Term firm transmission service reservation, confirmed Long-Term conditional firm transmission service reservation with roll over rights, designation of a Network Resource (DNR), a long-term confirmed redirect, or a Long-Term firm transmission service offer that will be confirmed following a transmission expansion project that has been securitized; or,
- (f) In lieu of submitting evidence of a Commercial Readiness Milestone as specified above in Section 3.3.1(a)-(e) of this Attachment R, a Commercial Readiness Deposit equal to twenty percent (20%) of the Network Upgrade costs allocated to Interconnection Customer in the Phase Two Cluster Study Report less any amounts already paid as a Commercial Readiness Deposit during the Phase One Cluster Study Review Period under Section 3.2.1(g) of this Attachment R. Interconnection Customer shall provide the Commercial Readiness Deposit in the form of a cash deposit, irrevocable letter of credit, or deposit into an escrow account that is established by Interconnection Customer. Transmission Provider will refund the Commercial Readiness Deposit to Interconnection Customer according to Sections 13.3.2 and 13.3.3 of the LGIP.
- (g) If Interconnection Customer's Commercial Readiness Milestone demonstration as specified in Section 3.3.1(a)-(e) does not meet the total requested Interconnection Service amount where applicable, Interconnection Customer shall supplement their Commercial Readiness Milestone with a Commercial Readiness Deposit in Section 3.3.1(f) that is reduced by a percentage based on the amount already demonstrated.

**Section 4. Procedures that Apply to Late-Stage Projects****4.1 Late-Stage Project Queue Position**

Interconnection Customer shall retain the queue position based upon the date and time of receipt of the original Interconnection Request for the Late-Stage Project. Moving a Point of Interconnection shall result in a new queue position if it is deemed a Material Modification under Section 4.6 of this Attachment R. The queue position of each Interconnection Request for the Late-Stage Project will be used to determine the order of performing the Interconnection Studies and determination of cost responsibility for the facilities necessary to accommodate the Interconnection Request for the Late-Stage Project. A higher queued Interconnection Request for the Late-Stage Project is one that has been placed “earlier” in the queue in relation to another Interconnection Request that is lower queued. An Interconnection Customer may transfer its queue position to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request for the Late-Stage Project and the Point of Interconnection does not change.

**4.2 Late-Stage Interconnection Facilities Studies**

Within fifteen (15) Business Days of the close of the Transition Request Window for valid Late-Stage Projects that elect to continue through the remaining Late-Stage Interconnection Facilities Study and interconnection agreement execution phases, (i.e., elect not to join the Transition Cluster Study), Transmission Provider shall provide to Interconnection Customer a new or an amended Late-Stage Interconnection Facilities Study Agreement in the form of Appendix 2 to this Attachment R. The Late-Stage Interconnection Facilities Study Agreement shall provide that Interconnection Customer shall compensate Transmission Provider for the actual cost of the Late-Stage Interconnection Facilities Study. Interconnection Customer shall execute the Late-Stage Interconnection Facilities Study Agreement and deliver the executed Late-Stage Interconnection Facilities Study Agreement to Transmission Provider within thirty (30) Calendar Days after its receipt, together with the required technical data and the deposit.

Transmission Provider shall notify Interconnection Customer of any deficiency in Interconnection Customer’s executed amended Late-Stage Interconnection Facilities Study Agreement or submission of required technical data in accordance with Section 3.7 in the LGIP.

**4.3 Late-Stage Interconnection Facilities Studies Deposit**

The Late-Stage Interconnection Facilities Study deposit amount will be a good faith estimate of Late-Stage Project Interconnection Request’s allocated share of the cost for Transmission Provider to perform the preliminary engineering necessary to complete the Late-Stage Interconnection Facilities Study report for the network plan of service identified in the Interconnection System Impact Study for the Late-Stage Project.

#### **4.4 Scope of Late-Stage Interconnection Facilities Study**

The Late-Stage Interconnection Facilities Study shall be specific to each Interconnection Request for the Late-Stage Project and performed on an individual, i.e. non-clustered, basis. The Late-Stage Interconnection Facilities Study shall specify and provide a non-binding estimate of the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study for the Late-Stage Project in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facilities to the Transmission System. The Late-Stage Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Transmission Provider's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities. The Late-Stage Interconnection Facilities Study will also identify any potential control equipment for requests for Interconnection Service for the Late-Stage Project that are lower than the Generating Facility Capacity.

#### **4.5 Late-Stage Interconnection Facilities Study Procedures And Provisions Applicable to Late-Stage Projects**

Transmission Provider shall perform the Late-Stage Interconnection Facility Study in accordance with Sections 8.3–8.5 of the LGIP. Interconnection Customer and Transmission Provider shall also follow the procedures in Sections 11-13 of the LGIP governing Engineering and Procurement Agreements, Large Generator Interconnection Agreements, Construction, and other miscellaneous terms.

#### **4.6 Modifications**

Interconnection Customer shall submit to Transmission Provider, in writing, modifications to any information provided in the Interconnection Request for the Late-Stage Project. Interconnection Customer shall retain its queue position if the modifications are in accordance with Section 4.6.3 or are determined not to be Material Modifications pursuant to Section 4.6.1. Notwithstanding the above, during the course of the Interconnection Studies, either Interconnection Customer or Transmission Provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request for the Late-Stage Project. To the extent the identified changes are acceptable to Transmission Provider and Interconnection Customer, such acceptance not to be unreasonably withheld, Transmission Provider shall modify the Point of Interconnection and/or configuration in accordance with such changes and proceed with any re-studies necessary to do so in accordance with Section 8.5 of the LGIP, as applicable, and Interconnection Customer shall retain its queue position.

**4.6.1** Prior to making any modification other than those specifically permitted



by Section 4.6.3, Interconnection Customer may first request that Transmission Provider evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, Transmission Provider shall evaluate the proposed modifications prior to making them and inform Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection shall constitute a Material Modification. Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

**4.6.2** Upon receipt of Interconnection Customer's request for modification permitted under this Section 4.6, Transmission Provider shall commence and perform any necessary additional studies as soon as practicable, but in no event shall Transmission Provider commence such studies later than thirty (30) Calendar Days after receiving notice of Interconnection Customer's request. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost.

**4.6.3** Extensions of less than three (3) cumulative years in the Commercial Operation Date of the Large Generating Facility to which the Interconnection Request relates are not material and should be handled through construction sequencing.

#### **4.7 Obligation for Study Costs and Refunds**

**4.7.1** Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Studies. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded, except as otherwise provided herein, to Interconnection Customer or offset against the cost of any future Interconnection Studies associated with the applicable Interconnection Request prior to beginning of any such future Interconnection Studies.

**4.7.2** In the event of Interconnection Customer's withdrawal pursuant to Section 3.7 of the LGIP, Transmission Provider shall refund to Interconnection Customer the refundable portion of the study deposit paid pursuant to Section 4.3. Such refundable portion for study deposits made under Section 4.3 shall be any amount that exceeds Interconnection Customer's share of the costs that Transmission Provider has incurred, including interest, calculated from the date the study deposit is received until the date a refund is made, at a rate equivalent to what Transmission Provider would earn on interest income as specified for the most recent Bonneville Transmission rate case and documented in the Transmission Revenue Requirement Study Documentation, or its successor.

**4.7.3** Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. Interconnection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice therefor. Transmission Provider shall not be obligated to perform or continue to perform any studies unless Interconnection Customer has paid all undisputed amounts in compliance herewith.

**4.8 Withdrawal Charges for Late-Stage Projects**

Interconnection Customer will not be assessed a Withdrawal Charge under Section 3.7 of the LGIP for the withdrawal of a Late-Stage Project that elects to continue through the remaining Late-Stage Interconnection Facilities Study and interconnection agreement execution phases, (i.e., elect not to join the Transition Cluster Study).

**Section 5. Interconnection Facilities Studies for Transition Cluster Study Requests**

Transmission Provider will conduct a separate Interconnection Facilities Study for each Transition Project that joined the Transition Cluster Study in accordance with Section 8 of the LGIP, except that the Interconnection Facilities Study Agreement tendered by Transmission Provider shall be in the form of Appendix 5 of this Attachment R.

**APPENDIX 1 to LARGE GENERATOR  
INTERCONNECTION TRANSITION PROCESS  
INTERCONNECTION REQUEST FOR A LARGE GENERATING FACILITY  
(TRANSITION REQUEST)**

1. The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility with Transmission Provider's Transmission System pursuant to a Tariff.
  
2. Transition election request (check one)  
 Late-Stage Process  
 Fast track into Late-Stage Process (must provide eligibility requirement)  
 Transition Cluster Study Process
  
3. For customers electing either Late-Stage Process or Fast Track if Transmission Provider determines that the request is ineligible for either the Late-Stage Process or the Fast Track into Late-Stage Process, would you like to be placed into the Transition Cluster?  
 YES  
 NO
  
4. Original queue number of the requested Large Generating Facility or Project: \_\_
  
5. Interconnection Customer provides the following information:
  - a. Address and latitude/longitude of the proposed new Large Generating Facility site (to the extent known) or, in the case of an existing Generating Facility, the name and latitude/longitude of the existing Generating Facility;  
  

---
  
  - b. For Interconnection Requests electing the Transition Cluster Study enter a single requested Point of Interconnection;  
  

---

- c. If electing a Transition Cluster Study, a steady state model of the Large Generating Facility including equivalent plant-level model, equivalent collector system if applicable, step-up transformers, and generation tie line in either PowerWorld or GE PSLF format;
  - d. If electing a transition cluster study a dynamic model of the Large Generating Facility in GE PSLF format.
6. Evidence of exclusive Site Control as specified in the LGIP is attached to this Interconnection Request.
  7. Acreage of Site Control demonstrations:\_\_\_\_\_
  8. Attached evidence of Commercial Readiness Milestone Option as specified in Section 2.1.2 of this Attachment R (check one):

\_\_\_\_\_ Executed term sheet (or comparable evidence) related to a for sale, where the term of the sale is not less than five (5) years, for (i) the constructed Generating Facility, (ii) the Generating Facility's energy or capacity, or (iii) the Generating Facility's Ancillary Services.

\_\_\_\_\_ Documentation from a Load-Serving Entity, commercial, industrial, large end-use customer, competitive retail supplier, power marketer, or other wholesale buyer of active negotiations (or the equivalent, e.g., for an ongoing relationship) for purchase of the output of Interconnection Customer's Large Generating Facility. During the Phase Two Customer Review Period, Interconnection Customer shall provide documentation that they continue to meet commercial readiness by providing evidence of another Commercial Readiness Milestone (e.g., executed term sheet).

\_\_\_\_\_ Executed contract binding upon the parties for sale to a Load-Serving Entity, competitive retail supplier, power marketer, or other wholesale buyer, or to a commercial, industrial, or other large end-use customer for: (i) the constructed Generating Facility, (ii) the Generating Facility's energy or capacity where the term of sale is not less than five (5) years, or (iii) the Generating Facility's Ancillary Services if the Generating Facility is an electric storage resource where the term of sale is not less than five (5) years.

\_\_\_\_\_ Reasonable evidence that the Generating Facility has been selected by or for a Load-Serving Entity in a Resource Plan or is on the final shortlist for a Resource Solicitation Process by or for a Load-Serving Entity, if such a plan or final short list has been approved or is acknowledged by the applicable authority (including for an Investor-Owned Utility its state utility commission, as applicable).

\_\_\_\_\_ Site specific purchase order for Generating and/or Interconnection Facilities specific to the Queue Position.

\_\_\_\_\_ Documentation from Interconnection Customer of reasonable evidence of transmission service reservation (or comparable evidence) for the Generating Facility. Transmission Provider at its sole discretion may evaluate individual facts and circumstances of reasonable evidence of transmission service that originates from the Point of Interconnection such as: a confirmed Long-Term firm transmission service reservation, Long-Term conditional firm transmission service reservation with roll over rights, or designation of a Network Resource (DNR), a long term confirmed redirect, or a Long-Term firm transmission service offer that will be confirmed following a transmission expansion project that has been securitized.

\_\_\_\_\_ Commercial Readiness Deposit in lieu of a Commercial Readiness Milestone Option, pursuant to Section 2.1.2(g) of Attachment R (check one and include amount).

\_\_\_\_\_ **For Late-Stage Projects (including Fast Track)**

100% of Interconnection Customer’s allocated interconnection facility and Network Upgrade costs identified in the system impact study report =  
\$ \_\_\_\_\_

\_\_\_\_\_ **For Transition Cluster Study**

\$6,000 x \_\_\_ MW total Generating Facility Capacity or total requested Interconnection Service amount if lesser = \$ \_\_\_\_\_

9. Signed Interconnection Requests may be scanned and submitted as email attachments to [Interconnection@bpa.gov](mailto:Interconnection@bpa.gov). Include your Transmission Account Executive on email submittals. The time a requested is received to the email box will be the time stamp.

10. Representative of Interconnection Customer to contact:

Name: \_\_\_\_\_

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

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

11. This Interconnection Request is submitted by:

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

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

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

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

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

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

**APPENDIX 2 to LARGE GENERATOR  
INTERCONNECTION TRANSITION PROCESS  
LATE-STAGE INTERCONNECTION FACILITIES STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into by and between \_\_\_\_\_, ("Interconnection Customer,") and the U.S. Department of Energy, acting by and through the Bonneville Power Administration, ("Transmission Provider "). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by Interconnection Customer on \_\_\_\_\_, and entered into the Interconnection Queue as Request No. xxxx; and

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

Transmission Provider has completed an Interconnection System Impact Study (the "System Impact Study") and provided the results of said study to Interconnection Customer as of June 30, 2024; and

Interconnection Customer has requested Transmission Provider to perform a Late-Stage Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the Transmission System.

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's LGIP and this Attachment R.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause a Late-Stage Interconnection Facilities Study consistent with Section 4 of this Attachment R to be performed in accordance with the Tariff.

- 3.0 Interconnection Customer has submitted to Transmission Provider a demonstration of Site Control in accordance with Section 2.1.1 of this Attachment R.
- 4.0 Interconnection Customer has submitted to Transmission Provider a Commercial Readiness Milestone Option in accordance with Section 2.1.2 of this Attachment R.
- 5.0 The scope of the Late-Stage Interconnection Facilities Study shall be subject to the assumptions set forth in the data provided in Attachment A to this Agreement.
- 6.0 The Late-Stage Interconnection Facilities Study report (i) shall provide a description, non-binding estimated cost of equipment, engineering, procurement and construction work needed to complete the project, schedule for required facilities to interconnect the Large Generating Facility to the Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.
- 7.0 Interconnection Customer shall provide a deposit for the performance of the Late-Stage Interconnection Facilities Study in accordance with Section 4.3 of this Attachment R

Interconnection Customer shall pay the actual costs of the Late-Stage Interconnection Facilities Study in accordance with Section 4.7 of this Attachment R.

- 8.0 The Late-Stage Interconnection Facilities Study is estimated to take [insert project schedule/duration] following execution of this Late-Stage Interconnection Facilities Study Agreement. Transmission Provider reserves the right to modify the project schedule by providing written notice to Interconnection Customer of the schedule change. Transmission Provider shall use Reasonable Efforts to complete the Late-Stage Interconnection Facilities Study and issue a draft Interconnection Facilities Study report to Interconnection Customer within the good faith estimated schedule provided herein in the Late-Stage Interconnection Facilities Study Agreement.
- 9.0 Miscellaneous. The Late-Stage Interconnection Facilities Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA.



**Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(INTERCONNECTION CUSTOMER NAME)

UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
*(Print/Type)*

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

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

**Attachment A to Appendix 2  
Late-Stage Interconnection  
Facilities Study Agreement**

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

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

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

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

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

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

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

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

---

What protocol does the control system or PLC use?

---

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

Physical dimensions of the proposed interconnection station:

---

Bus length from generation to interconnection station:

---

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

---

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

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

---

\* To be completed in coordination with Transmission

Provider. Is the Large Generating Facility in Transmission Provider's service area?

\_\_\_\_\_Yes     \_\_\_\_\_No     Local provider: \_\_\_\_\_

Please provide proposed schedule dates:

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

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

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

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

**APPENDIX 3 to LARGE GENERATOR  
INTERCONNECTION TRANSITION PROCESS  
PHASE ONE CLUSTER STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into by and between \_\_\_\_\_  
\_\_\_\_\_"(Interconnection Customer,") and the U.S.  
Department of Energy, acting by and through the Bonneville Power Administration,  
("Transmission Provider "). Interconnection Customer and Transmission Provider each  
may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

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

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

Interconnection Customer has requested Transmission Provider to perform a Phase  
One Cluster Study to assess the feasibility of interconnecting the proposed Large  
Generating Facility to the Transmission System, and of any Affected Systems;

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified  
shall have the meanings indicated in Transmission Provider's LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be  
performed a Phase One Cluster Study consistent with Section 6 of the LGIP,  
except Section 6.6.1 shall not apply.
- 3.0 The Phase One Cluster Study shall be based on the technical information  
provided by Interconnection Customer in the Interconnection Request,  
including the optional requested Point of Interconnection set forth in  
Attachment A to this agreement. Transmission Provider reserves the right to  
request additional technical information from Interconnection Customer as  
may reasonably become necessary consistent with Good Utility Practice during  
the course of the Phase One Cluster Study and as designated in accordance  
with Section 3.4.4. of the LGIP.

4.0 Interconnection Customer has submitted to Transmission Provider a Commercial Readiness Milestone Option in accordance with Section 2.1.2 of this Attachment R.

5.0 The Phase One Cluster Study Report shall provide the following information:

- Point of Interconnection as determined by Transmission Provider.
- preliminary identification of any equipment short circuit capability limits exceeded as a result of the interconnection;
- preliminary identification of any applicable thermal or voltage facility ratings exceeded as a result of the interconnection; and
- preliminary description and non-bonding estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit and power flow issues.

6.0 Interconnection Customer shall provide a deposit in accordance with Section 6.1.1 of the LGIP for the performance of the Phase One Cluster Study.

Upon receipt of the Phase One Cluster Study or Phase One Cluster Re-Study, Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Phase One Cluster Study and Phase One Cluster Re-Study, as applicable.

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

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

### **Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(INTERCONNECTION CUSTOMER NAME)

UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
*(Print/Type)*

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

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

**Attachment A To Appendix 3  
Phase One Cluster Study  
Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE  
PHASE ONE CLUSTER STUDY**

The Phase One Cluster Study will be based upon the information set forth in the Interconnection Request.

Requested Point of Interconnection optionally provided in the Interconnection Request and configuration to be studied.

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

**APPENDIX 4 to LARGE GENERATOR  
INTERCONNECTION TRANSITION PROCESS  
PHASE TWO CLUSTER STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into by and between \_\_\_\_\_  
\_\_\_\_\_"(Interconnection Customer,") and the U.S.  
Department of Energy, acting by and through the Bonneville Power Administration,  
("Transmission Provider "). Interconnection Customer and Transmission Provider each  
may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

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

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

Transmission Provider has completed a Phase One Cluster Study and provided the  
results of said study to Interconnection Customer; and

Interconnection Customer has requested Transmission Provider to perform a Phase  
Two Cluster Study to assess the impact of interconnecting the Large Generating Facility to  
the Transmission System, and of any Affected Systems;

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed a Phase Two Cluster Study consistent with Section 7 of the LGIP, except that Section 7.5.1 shall not apply.
- 3.0 Interconnection Customer has provided Transmission Provider a Commercial Readiness Milestone Option, in accordance with Section 3.2.1 of this Attachment R.
- 4.0 Interconnection Customer has submitted to Transmission Provider validated detailed models representing the Generating Facility, in accordance with Section 6.6.2 of the LGIP.



- 5.0 Interconnection Customer has submitted to Transmission Provider a re-demonstration of Site Control in accordance with Section 6.6.3 of the LGIP.
- 6.0 The scope of the Phase Two Cluster Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 7.0 The Phase Two Cluster Study will be based upon the results of the Phase One Cluster Study Report and the technical information provided by Interconnection Customer in the Interconnection Request, subject to any modifications in accordance with Section 4.4 of the LGIP. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Phase Two Cluster Study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Phase Two Cluster Study may be extended.
- 8.0 The Phase Two Cluster Study Report shall provide the following information:
- identification of any equipment short circuit capability limits exceeded as a result of the interconnection;
  - identification of any thermal or voltage applicable facility ratings exceeded as a result of the interconnection;
  - identification of any instability or inadequately damped response to system disturbances resulting from the interconnection; and
  - description and non-binding, good faith estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit, instability, and power flow issues.
- 9.0 Interconnection Customer shall provide a deposit in accordance with Section 7.1.1 of the LGIP, for the performance of the Phase Two Cluster Study.

Upon receipt of the Phase Two Cluster Study or Phase Two Cluster Re-Study, Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Phase Two Cluster Study and Phase Two Cluster Re-Study, as applicable.

Any difference between the deposit and the actual cost of the study shall be

paid by or refunded to Interconnection Customer, as appropriate.

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

**Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(INTERCONNECTION CUSTOMER NAME)	UNITED STATES OF AMERICA Department of Energy Bonneville Power Administration
---------------------------------	---

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
*(Print/Type)*

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

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

**Attachment A To Appendix 4  
Phase Two Cluster Study Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE PHASE TWO  
CLUSTER STUDY**

The Phase Two Cluster Study will be based upon the results of the Phase One Cluster Study or Phase One Cluster Re-Study, as applicable, subject to any modifications in accordance with Section 4.4 of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

[Above assumptions to be completed by Transmission Provider]

**APPENDIX 5 to LARGE GENERATOR  
INTERCONNECTION TRANSITION PROCESS  
INTERCONNECTION FACILITIES STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into by and between \_\_\_\_\_  
\_\_\_\_\_"(Interconnection Customer,") and the U.S.  
Department of Energy, acting by and through the Bonneville Power Administration,  
("Transmission Provider "). Interconnection Customer and Transmission Provider each  
may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

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

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

Transmission Provider has completed a Phase Two Cluster Study or Phase Two  
Cluster Re-Study and provided the results of said study to Interconnection Customer; and

Interconnection Customer has requested Transmission Provider to perform an  
Interconnection Facilities Study to specify and estimate the cost of the equipment,  
engineering, procurement and construction work needed to implement the conclusions of  
the Phase Two Cluster Study or Phase Two Cluster Re-Study in accordance with Good  
Utility Practice to physically and electrically connect the Large Generating Facility to the  
Transmission System.

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified  
shall have the meanings indicated in Transmission Provider's LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause an  
Interconnection Facilities Study consistent with Section 8.0 of this LGIP to  
be performed in accordance with the Tariff.
- 3.0 Interconnection Customer has submitted to Transmission Provider a  
Commercial Readiness Milestone Option, in accordance with Section 3.3.1 of  
this Attachment R.
- 4.0 Interconnection Customer has submitted to Transmission Provider technical  
data in accordance with Section 7.5.2 of the LGIP.

- 5.0 Interconnection Customer has submitted to Transmission Provider a re-demonstration of Site Control in accordance with Section 7.5.3 of the LGIP.
- 6.0 The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in the data provided in Attachment A to this Agreement.
- 7.0 The Interconnection Facilities Study report (i) shall provide a description, estimated cost of, schedule for required facilities to interconnect the Large Generating Facility to the Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Phase Two Cluster Study or Phase Two Cluster Re-Study.
- 8.0 Interconnection Customer shall pay the actual costs of the Interconnection Facilities Study in accordance with Section 8.1 of the LGIP.
- 9.0 The Interconnection Facilities Study is estimated to take [insert project schedule/duration] following execution of this Interconnection Facilities Study Agreement. Transmission Provider reserves the right to modify the project schedule by providing written notice to Interconnection Customer of the schedule change. Transmission Provider shall use Reasonable Efforts to complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study report to Interconnection Customer within the good faith estimated schedule provided herein in the Interconnection Facilities Study Agreement.
- 10.0 Miscellaneous. The Interconnection Facilities Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the LGIP and the LGIA under the LGIP.

### **Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(INTERCONNECTION CUSTOMER NAME)

UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
*(Print/Type)*

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

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

**Attachment A to Appendix 5  
Interconnection Facilities  
Study Agreement**

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

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

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

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

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

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

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

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

---

What protocol does the control system or PLC use?

---

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

Physical dimensions of the proposed interconnection station:

---





**Appendix 6 to the Large  
Generator Interconnection  
Transition Process**

**STANDARD LARGE GENERATOR  
INTERCONNECTION AGREEMENT FOR  
NON-CLUSTERED TRANSITION REQUESTS (LGIA)**

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## STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT

**THIS STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT** ("LGIA") is made and entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_ , by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Large Generating Facility), and The UNITED STATES OF AMERICA, Department of Energy, acting by and through the Bonneville Power Administration, ("Transmission Provider and/or Transmission Owner"). Interconnection Customer and Transmission Provider each may be referred to as a "Party" or collectively as the "Parties."

### Recitals

Transmission Provider operates the Transmission System; and

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 LGIA.

Interconnection Customer and Transmission Provider have agreed to enter into this LGIA for the purpose of interconnecting the Large Generating Facility with the Transmission System.

In consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this 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 or the Tariff.

**Article 1. Definitions**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for re-studies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

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

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the 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 and render the transmission service necessary to affect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the 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 LGIA to possess black start capability.

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

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

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

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

**FERC** shall mean the Federal Energy Regulatory Commission 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 for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**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.

**Generating Facility Replacement Request** shall mean an Interconnection Customer's request, in accordance with the Tariff, to replace of one or more aged generating units, at an existing Generating Facility interconnected with Transmission Provider's Transmission System.

**Generating Facility Repower Request** shall mean an Interconnection Customer's request, in accordance with the Tariff, to replace one or more aged components of a generating unit, at an existing Generating Facility interconnected with Transmission Provider's Transmission System.

**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 any entity, including the Transmission Provider, Transmission Owner or any of the Affiliates or subsidiaries of either, that proposes to interconnect its Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the 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 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 Section 8 of the Standard Large Generator Interconnection Procedures (LGIP). Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

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

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

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the LGIP, in accordance with the Tariff, 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 LGIA and, if applicable, the Transmission Provider's Tariff.

**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 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 LGIP.

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

**Joint Operating Committee** shall be a group made up of representatives from Interconnection Customers and the Transmission Provider to coordinate operating and technical considerations of Interconnection Service.

**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 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 LGIA at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines and fiber optics.

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

**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 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 LGIA or its performance.

**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 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 LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities.

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

**Provisional Interconnection Service** shall mean Interconnection Service provided by Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to Transmission Provider's Transmission System and enabling that Transmission System to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Provisional Large Generator Interconnection Agreement and, if applicable, the Tariff.

**Provisional Large Generator Interconnection Agreement** shall mean the interconnection agreement for Provisional Interconnection Service established between Transmission Provider and/or the Transmission Owner and the Interconnection Customer. This agreement shall take the form of the Large Generator Interconnection Agreement, modified for provisional purposes.

**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 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 20 MW.

**Stand Alone Network Upgrades** shall mean Network Upgrades that are not part of an Affected System that Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Both Transmission Provider and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement. If Transmission Provider and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, Transmission Provider must provide Interconnection Customer a written technical explanation outlining why Transmission Provider does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**Standard Large Generator Interconnection Agreement (LGIA)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in the Transmission Provider's Tariff.

**Standard Large Generator Interconnection Procedures (LGIP)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are included in the Transmission Provider's Tariff.

**Surplus Interconnection Customer** shall mean an entity that proposes to utilize or transfer Surplus Interconnection Service in accordance with Section 3.3 of the LGIP.

**Surplus Interconnection Service** shall mean any unneeded portion of Interconnection Service established in a Large Generator Interconnection Agreement, such that if Surplus Interconnection Service is utilized, the total amount of Interconnection Service at the Point of Interconnection would remain the same.

**Surplus Interconnection Service Request** shall mean a Surplus Interconnection Customer's request, in accordance with Section 3.3 of the LGIP, to utilize or transfer Surplus Interconnection Service at an existing Point of Interconnection.

**Surplus Scoping Meeting** shall mean the meeting between representatives of the Surplus Interconnection Customer and Transmission Provider conducted for the purpose of discussing the Surplus Interconnection Service Request and exchanging information.

**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.

**Tariff** shall mean the Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as amended or supplemented from time to time, or any successor tariff.

**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 Standard LGIA to the extent necessary.

**Transmission Provider** shall mean the public utility (or its designated agent) that owns, controls or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff. The term Transmission Provider should be read to include the Transmission Owner when the Transmission Owner is separate from the Transmission Provider.

**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 Standard 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 Tariff.

**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.

**Variable Energy Resource** shall mean a device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator.

**Article 2. Effective Date, Term and Termination****2.1 Effective Date.**

This LGIA shall become effective upon execution by the Parties.

**2.2 Term of Agreement.**

Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of ten (10) years from the Effective Date or such other longer period as Interconnection Customer may request (Term to be specified in individual agreements) and shall be automatically renewed for each successive one-year period thereafter.

**2.3 Termination Procedures.****2.3.1 Written Notice.**

This LGIA may be terminated by Interconnection Customer after giving Transmission Provider ninety (90) Calendar Days advance written notice or by Transmission Provider notifying FERC after the Generating Facility permanently ceases Commercial Operation.

**2.3.2 Default.**

Either Party may terminate this 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.

**2.4 Termination Costs.**

If a Party elects to terminate this Agreement pursuant to Article 2.3 above, each Party shall pay all costs incurred (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, for which it is responsible under this 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.

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

not taken by Interconnection Customer, Transmission Provider shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by Transmission Provider to cancel any pending orders of or return such materials, equipment or contracts.

If an Interconnection Customer terminates this 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 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 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 LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.

## **2.6 Survival.**

This 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 LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Party pursuant to this 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 LGIA (and any amendment hereto) with the appropriate Governmental Authority, if required. Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If Interconnection Customer has executed this 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.

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

##### **4.1 Interconnection Product Options.**

Interconnection Customer has selected the following (checked) type of Interconnection Service:

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

###### **4.1.1.1 The Product.**

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

###### **4.1.1.2 Transmission Delivery Service Implications.**

Under Energy Resource Interconnection Service, Interconnection Customer will be eligible to inject power from the Large Generating Facility into and deliver power across the interconnecting Transmission Provider's Transmission System on an "as available" basis up to the amount of MWs identified in the applicable stability and steady state studies to the extent the upgrades initially required to qualify for Energy Resource Interconnection Service have been constructed. Where eligible to do so (e.g., PJM, ISO-NE, NYISO), Interconnection Customer may place a bid to sell into the market up to the maximum identified Large Generating Facility output, subject to any conditions specified in the interconnection service approval and the Large Generating Facility will be dispatched to the extent Interconnection Customer's bid clears. In all other instances, no transmission delivery service from the Large Generating Facility is assured, but Interconnection Customer may obtain Point-to-Point Transmission Service, Network Integration Transmission Service or be used for secondary network transmission service, pursuant to Transmission Provider's Tariff, up to the maximum output identified in the stability and steady state studies. In those instances, in order for Interconnection Customer to obtain the right to deliver or inject energy beyond the Large Generating Facility Point of Interconnection or to improve its ability to do so, transmission delivery service must be obtained pursuant to the provisions of Transmission Provider's Tariff. Interconnection Customer's ability to inject its Large Generating Facility output beyond the Point of Interconnection, therefore, will

depend on the existing capacity of Transmission Provider's Transmission System at such time as a transmission service request is made that would accommodate such delivery. The provision of firm Point-to-Point Transmission Service or Network Integration Transmission Service may require the construction of additional Network Upgrades.

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

##### **4.1.2.1 The Product.**

Transmission Provider must conduct the necessary studies and construct the Network Upgrades needed to integrate the Large Generating Facility: (1) in a manner comparable to that in which Transmission Provider integrates its generating facilities to serve native load customers; or (2) in an ISO or RTO with market-based congestion management, in the same manner as all Network Resources. To the extent Interconnection Customer wants to receive Network Resource Interconnection Service, Transmission Provider shall construct the facilities identified in Appendix A to this LGIA

##### **4.1.2.2 Transmission Delivery Service Implications.**

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

construction of additional upgrades. Because such studies and upgrades would be associated with a request for delivery service under the Tariff, cost responsibility for the studies and upgrades would be in accordance with FERC's policy for pricing transmission delivery services.

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

There is no requirement either at the time of study or interconnection, or at any point in the future, that Interconnection Customer's Large Generating Facility be designated as a Network Resource by a Network Service Customer under the Tariff or that Interconnection Customer identify a specific buyer (or sink). To the extent a Network Customer does designate the Large Generating Facility as a Network Resource, it must do so pursuant to Transmission Provider's Tariff.

Once an Interconnection Customer satisfies the requirements for obtaining Network Resource Interconnection Service, any future transmission service request for delivery from the Large Generating Facility within Transmission Provider's Transmission System of any amount of capacity and/or energy, up to the amount initially studied, will not require that any additional studies be performed or that any further upgrades associated with such Large Generating Facility be undertaken, regardless of whether or not such Large Generating Facility is ever designated by a Network Customer as a Network Resource and regardless of changes in ownership of the Large Generating Facility. However, the reduction or elimination of congestion or redispatch costs may require additional studies and the construction of additional upgrades.

To the extent Interconnection Customer enters into an arrangement for long-term transmission service for deliveries from the Large Generating Facility outside Transmission Provider's Transmission System, such request may require additional studies and upgrades in order for Transmission Provider to grant such request.

#### **4.2 Provision of Service.**

Transmission Provider shall provide 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 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 LGIA for its compliance therewith.

**4.4 No Transmission Delivery Service.**

The execution of this LGIA does not constitute a request for, nor the provision of, any transmission delivery service under Transmission Provider's Tariff and does not convey any right to deliver electricity to any specific customer or point of delivery.

**4.5 Interconnection Customer Provided Services.**

The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.5.1. 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 the Standard Option or Alternate Option set forth below, and such dates and selected option shall be set forth in Appendix B, Milestones. At the same time, Interconnection Customer shall indicate whether it elects to exercise the Option to Build set forth in Article 5.1.3 below. 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. Upon receipt of the notification that Interconnection Customer's designated dates are not acceptable to Transmission Provider, Interconnection Customer shall notify Transmission Provider within thirty (30) Calendar Days whether it elects to exercise the Option to Build if it has not already elected to exercise the Option to Build..

**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.**

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 the dates designated by Interconnection Customer are not acceptable to Transmission Provider, 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 all facilities other than Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades if Interconnection Customer elects to exercise the Option to Build under Article 5.1.3). If the Parties are unable to reach agreement on such terms and conditions, then pursuant to Article 5.1.1 (Standard Option), Transmission Provider shall assume responsibility for the design, procurement and construction of all facilities other than Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades if Interconnection Customer elects to exercise the Option to Build.

**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:

- 5.2.1** 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;
- 5.2.2** 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 to which Transmission Provider would be subject in the engineering, procurement or construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;
- 5.2.3** 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;
- 5.2.4** 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;
- 5.2.5** 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;
- 5.2.6** 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, Interconnection Customer shall be obligated to remedy deficiencies in that portion of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;
- 5.2.7** (Intentionally Omitted);
- 5.2.8** Interconnection Customer shall transfer control of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Provider;
- 5.2.9** unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Provider;

**5.2.10** 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

**5.2.11** 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.

**5.2.12** If Interconnection Customer exercises the Option to Build pursuant to Article 5.1.3, Interconnection Customer shall pay Transmission Provider the agreed upon amount of [PLACEHOLDER] for Transmission Provider to execute the responsibilities enumerated to Transmission Provider under Article 5.2. Transmission Provider shall invoice Interconnection Customer according to the schedule provided in Appendix B.

### **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 Subparagraphs 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 one-half 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 twenty (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 LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for Transmission Provider's failure to meet its schedule.

No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for the Large Generating Facility's Trial Operation or to export power from the Large Generating Facility on the

specified dates, unless Interconnection Customer would have been able to commence use of Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for Large Generating Facility's Trial Operation or to export power from the Large Generating Facility, but for Transmission Provider's delay; (2) Transmission Provider's failure to meet the specified dates is the result of the action or inaction of Interconnection Customer or any other Interconnection Customer who has entered into an LGIA with Transmission Provider or any cause beyond Transmission Provider's reasonable control or reasonable ability to cure; (3) 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.**

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 **Other Interconnection Options**

### 5.9.1 **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 LGIA. Transmission Provider shall permit Interconnection Customer to operate the Large Generating Facility and Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

### 5.9.2 **Provisional Interconnection Service.**

Upon the request of Interconnection Customer, and prior to completion of requisite Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities and after completion of the NEPA process and a decision to approve the project Transmission Provider may execute a Provisional Large Generator Interconnection Agreement. Transmission Provider shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if Interconnection Customer interconnects without modifications to the Generating Facility or Transmission Provider's system. Transmission Provider shall determine whether any Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities that are necessary to meet the requirements of NERC, or any applicable Regional Entity for the interconnection of a new, modified and/or expanded Generating Facility are in place prior to the commencement of Interconnection Service from the Generating Facility. Where available studies indicate that such, Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities that are required for the interconnection of a new, modified and/or expanded Generating Facility are not currently in place, Transmission Provider will perform a study, at Interconnection Customer's expense, to confirm the facilities that are required for Provisional Interconnection Service. The maximum permissible output of the Generating Facility in the Provisional Large Generator Interconnection Agreement shall be studied and updated on an annual basis and at Interconnection Customer's expense. Interconnection Customer assumes all risk and liabilities with respect to changes between the Provisional Large Generator Interconnection Agreement and the Large Generator Interconnection Agreement, including changes in output limits and Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities cost responsibilities.

#### **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. 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 following "as-built" drawings, information and documents for Transmission Provider's Interconnection Facilities: drawings, diagrams, and other information reasonably related to the specifications set forth in Appendix A.

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: (1) interconnect the Large Generating Facility with the Transmission System; (2) operate and maintain the

Large Generating Facility, the Interconnection Facilities and the Transmission System; and (3) disconnect or remove the Access Party's facilities and equipment upon termination of this 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 federal 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 shall cooperate with each other in good faith in obtaining all permits, licenses and authorizations that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, Transmission Provider or Transmission Owner shall provide permitting assistance to Interconnection Customer comparable to that provided to Transmission Provider's own, or an Affiliate's generation.

**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 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: (1) has incurred pursuant to this LGIA prior to the



suspension; and (2) 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 LGIA pursuant to this Article 5.16, and has not requested Transmission Provider to recommence the work required under this LGIA on or before the expiration of three (3) years following commencement of such suspension, this 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 (Intentionally Omitted).**

**5.18 Tax Status.**

Transmission Provider shall cooperate with Interconnection Customer to maintain Interconnection Customer's tax status. Nothing in this 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 LGIA 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 Tariff. 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 at its own expense 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.

#### **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: (1) observe the other Party's tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (2) review the settings of the other Party's System Protection Facilities and other protective equipment; and (3) 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 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 LGIA.

**Article 7. Metering****7.1 General.**

Each Party shall comply with the Applicable Reliability Council requirements. 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 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 LGIA, except as provided in Article 7.4 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.

**7.3 Standards.**

Transmission Provider shall install, calibrate and test revenue quality Metering Equipment in accordance with applicable ANSI standards.

**7.4 Testing of Metering Equipment.**

Transmission Provider shall 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 (2) 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.

#### **7.5 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.

#### **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 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.

### **8.4 Provision of Data from a Variable Energy Resource.**

Interconnection Customer whose Generating Facility is a Variable Energy Resource shall provide meteorological and forced outage data to Transmission Provider to the extent necessary for Transmission Provider's development and deployment of power production forecasts for that class of Variable Energy Resources. Interconnection Customer with a Variable Energy Resource having wind as the energy source, at a minimum, will be required to provide Transmission Provider with site-specific meteorological data including: temperature, wind speed, wind direction, and atmospheric pressure. Interconnection Customer with a Variable Energy Resource having solar as the energy source, at a minimum, will be required to provide Transmission Provider with site-specific meteorological data including: temperature, atmospheric pressure, and irradiance. Transmission Provider and Interconnection Customer whose Generating Facility is a Variable Energy Resource shall mutually agree to any additional meteorological data that are required for the development and deployment of a power production forecast. Interconnection Customer whose Generating Facility is a Variable Energy Resource also shall submit data to Transmission Provider regarding all forced outages to the extent necessary for Transmission Provider's development and deployment of power production forecasts for that class of Variable Energy Resources. The exact specifications of the meteorological and forced outage data to be provided by Interconnection Customer to Transmission Provider, including the frequency and timing of data submittals, shall be made taking into account the size and configuration of the Variable Energy Resource, its characteristics, location, and its importance in maintaining generation resource adequacy and transmission system reliability in its area. All requirements for meteorological and forced outage data must be commensurate with the power production forecasting employed by Transmission Provider. Such requirements for meteorological and forced outage data are set forth in Appendix C, Interconnection Details, of this LGIA, as they may change from time to time.

**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 Control Area Notification.**

At least three (3) months before Initial Synchronization Date, Interconnection Customer shall notify Transmission Provider in writing of the Control Area in which the Large Generating Facility will be located. If Interconnection Customer elects to locate the Large Generating Facility in a Control Area other than the Control Area in which the Large Generating Facility is physically located, and if permitted to do so by the relevant transmission tariffs, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Control Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Control Area.

**9.3 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 LGIA. Transmission Provider may provide operating instructions to Interconnection Customer consistent with this 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.

**9.4 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 LGIA. Interconnection Customer shall operate the Large Generating Facility and Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of the Control Area of which it is part, as such requirements are set forth in Appendix C, Interconnection Details, of this 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 LGIA.

**9.5 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.

## **9.6 Reactive Power and Primary Frequency Response.**

### **9.6.1 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.

### **9.6.2 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 the System Operator.

#### **9.6.2.1 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.

### **9.6.3 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.

### **9.6.4 Primary Frequency Response.**

Interconnection Customer shall ensure the primary frequency response capability of its Large Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term “functioning governor or equivalent controls” as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Large Generating Facility’s real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations.

Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Large Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Large Generating Facility’s real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Large Generating Facility’s real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of the Large Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Large Generating Facility with the Transmission System, Interconnection Customer shall operate the Large Generating Facility consistent with the provisions specified in Sections 9.6.4.1 and 9.6.4.2 of this Agreement.



The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Large Generating Facilities.

**9.6.4.1 Governor or Equivalent Controls.**

Whenever the Large Generating Facility is operated in parallel with the Transmission System, Interconnection Customer shall operate the Large Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Interconnection Customer needs to operate the Large Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Large Generating Facility's governor or equivalent controls to a minimum whenever the Large Generating Facility is operated in parallel with the Transmission System.

**9.6.4.2 Timely and Sustained Response.**

Interconnection Customer shall ensure that the Large Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Large Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Large Generating Facility shall sustain the real power response at least until

system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

#### **9.6.4.3 Exemptions.**

Large Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from Sections 9.6.4, 9.6.4.1, and 9.6.4.2 of this Agreement. Large Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Section 9.6.4, but shall be otherwise exempt from the operating requirements in Sections 9.6.4, 9.6.4.1, 9.6.4.2, and 9.6.4.4 of this Agreement.

#### **9.6.4.4 Electric Storage Resources.**

Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Appendix C of its LGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Sections 9.6.4, 9.6.4.1, 9.6.4.2 and 9.6.4.3 of this Agreement.

Appendix C shall specify whether the operating range is static or dynamic, and shall consider (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Appendix C must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Section 9.6.4.2 of this Agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes

circumstances when the electric storage resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

## **9.7 Outages and Interruptions.**

### **9.7.1 Outages.**

#### **9.7.1.1 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.

#### **9.7.1.2 Outage Schedules.**

Transmission Provider shall post scheduled outages of its transmission facilities on the 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 (24) 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.

**9.7.1.3 Outage Restoration.**

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

**9.7.2 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:

**9.7.2.1** The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice.

**9.7.2.2** 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.

**9.7.2.3** 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.

**9.7.3 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. Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and

over-frequency deviations, shall be studied and coordinated with Transmission Provider in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a 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.

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

##### **9.7.4.1 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.

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

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

**9.7.4.4** 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.

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

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

#### **9.7.5 Requirements for Protection.**

In compliance with Good Utility Practice, Interconnection Customer shall provide, install, own and maintain relays, circuit breakers and all other devices

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

#### **9.7.6 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.

#### **9.8 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.

#### **9.9 Use of Interconnection Facilities by Third Parties.**

##### **9.9.1 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.

##### **9.9.2 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 FERC for resolution.

#### **9.10 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 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 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 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.**

Transmission Provider or Transmission Owner shall design, procure, construct, install, own and/or control Transmission Provider's Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at the sole expense of 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. 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 Transmission Credits.****11.4.1 Repayment of Amounts Advanced for Network Upgrades.**

Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to Transmission Provider and Affected System Operator, if any, for the Network Upgrades, to be paid to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Large Generating Facility. Any repayment shall include interest calculated at the rate for ten-year bonds posted on Bloomberg, L.P., under the United States Government Agency fair market yield curve (yield curve number 84) as in effect on the first day of the month during which Transmission Provider receives the first payment for Network Upgrades, such interest to accrue from the date of any payment for Network Upgrades through the date on which Interconnection Customer receives



a repayment of such payment pursuant to this subparagraph. Interconnection Customer may assign such repayment rights to any person.

Notwithstanding the foregoing, Interconnection Customer, Transmission Provider and Affected System Operator may adopt any alternative payment schedule that is mutually agreeable so long as Transmission Provider and Affected System Operator take one of the following actions no later than five (5) years from the Commercial Operation Date: (1) return to Interconnection Customer any amounts advanced for Network Upgrades not previously repaid; or (2) declare in writing that Transmission Provider or Affected System Operator will continue to provide payments to Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the Commercial Operation Date.

If the Large Generating Facility fails to achieve commercial operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, Transmission Provider and Affected System Operator shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying the entity to which reimbursement must be made.

#### **11.4.2 Special Provisions for Affected Systems.**

Unless Transmission Provider provides, under the LGIA, for the repayment of amounts advanced to Affected System Operator for Network Upgrades, Interconnection Customer and Affected System Operator shall enter into an agreement that provides for such repayment. The agreement shall specify the terms governing payments to be made by Interconnection Customer to the Affected System Operator as well as the repayment by the Affected System Operator.

**11.4.3** Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that Interconnection Customer, shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Large Generating Facility.

#### **11.5 Provision of Security.**

At least thirty (30) Calendar Days prior to the commencement of the 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. Such security for payment shall be in an amount sufficient to cover the costs for constructing, 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 Article 9.6.3, Payment for Reactive Power or Article 13.5.1 of this 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 Interconnection Customer is required to provide or absorb any Reactive Power under this LGIA, Transmission Provider agrees to compensate Interconnection Customer in such amount as would have been due Interconnection Customer had the rate schedule been in effect at the time service commenced; provided however, that such rate schedule must be filed at FERC or other appropriate Governmental Authority within sixty (60) Calendar Days of the commencement of service.

### **11.6.1 Interconnection Customer Compensation for Actions during Emergency Condition.**

Transmission Provider or RTO or ISO shall compensate Interconnection Customer for its provision of real and reactive power and other Emergency Condition services that Interconnection Customer provides to support the Transmission System during an Emergency Condition in accordance with Article 11.6.

**Article 12. Invoice****12.1 General.**

Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this 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 (6) 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, Addresses for Delivery of Notices and Billings. 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 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 LGIA as long as Interconnection Customer: (1) continues to make all payments not in dispute; and (2) 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 Definition.**

"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 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 the Transmission System, Transmission Provider's Interconnection Facilities or the Transmission Systems of others to which the 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 Large 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 this LGIA to possess black start capability.

**13.2 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 Joint Operating Committee.

**13.3 Notice.**

Transmission Provider shall notify Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects Transmission Provider's Interconnection Facilities or the Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Large Generating Facility or Interconnection Customer's Interconnection Facilities. Interconnection Customer shall notify Transmission Provider promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the Transmission System or Transmission Provider's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of Interconnection Customer's or Transmission Provider's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken.

**13.4 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.

## **13.5 Transmission Provider Authority.**

### **13.5.1 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: (1) preserve public health and safety; (2) preserve the reliability of the Transmission System or Transmission Provider's Interconnection Facilities; (3) limit or prevent damage; and (4) expedite restoration of service.

Transmission Provider shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or Interconnection Customer's Interconnection Facilities. Transmission Provider may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility, implementing a reduction or disconnection pursuant to Article 13.5.2, directing Interconnection Customer to assist with black start (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.

### **13.5.2 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 Tariff. 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.

**13.6 Interconnection Customer Authority.**

Consistent with Good Utility Practice and the LGIA and the 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: (1) preserve public health and safety; (2) preserve the reliability of the Large Generating Facility or Interconnection Customer's Interconnection Facilities; (3) limit or prevent damage; and (4) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Transmission System and Transmission Provider's Interconnection Facilities. Transmission Provider shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.7 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 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. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this 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 LGIA and each of its provisions shall be governed by federal law.

**14.2.2** This 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 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 delivered in person, in writing, by email, facsimile, or First Class mail or overnight

delivery service at the address set out in Appendix F, Addresses for Delivery of Notices and Billings. Notices are effective on the date received.

Either Party may change the notice information in this 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, Addresses for delivery of Notices and Billings.

### **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 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, Addresses for delivery of Notices and Billings.

For any service interruptions, Emergency Conditions, operating instructions, curtailments, or dispatch orders, Transmission Provider may notify Interconnection Customer through any of the following methods: (1) by electronic signal pre-arranged between Interconnection Customer and Transmission Provider, (2) by telephone, facsimile or email to the telephone numbers and email addresses set out in Appendix F, Addresses for delivery of Notices and Billings, (3) by a change request to a transaction submitted according to the NERC e-Tag protocol, or (4) as otherwise agreed between Interconnection Customer and Transmission Provider. Transmission Provider is not responsible for ensuring that Interconnection Customer has the continuous ability to receive Transmission Provider's electronic signals.

### **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 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 Default 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 Default 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 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 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 LGIA.

## **Article 18. Indemnity, Consequential Damages, and Insurance**

Article 18.1 applies only if, at the time of the action or inaction by a Party that gave rise to the Party's right to indemnification, either Transmission Provider or Interconnection Customer was not a party to the Agreement Limiting Liability among Western Interconnected Electric Systems.

### **18.1 Indemnity.**

The Parties shall at all times indemnify 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 inaction of its obligations under this 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. (Intentionally Omitted)**

**18.1.2 Indemnified 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.

**18.2 Consequential Damages.**

Other than the Liquidated Damages heretofore described, in no event shall either Party be liable under any provision of this 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.**

Interconnection Customer shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by Transmission Provider, the following minimum insurance coverage, 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 Transmission Provider, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees (Transmission Provider 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 LGIA against Transmission Provider Party Group and provide thirty (30) Calendar Days advance written notice to Transmission Provider 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. Interconnection Customer 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 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 Interconnection Customer are not intended to and shall not in

any manner, limit or qualify the liabilities and obligations assumed by Interconnection Customer under this LGIA.

**18.3.9** Within ten (10) Calendar Days following execution of this 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) Calendar Days thereafter, Interconnection Customer shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.

**18.3.10** Notwithstanding the foregoing, Interconnection Customer 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, Interconnection Customer has an issuer credit rating or a senior unsecured debt rating of investment grade or better as rated 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 Interconnection Customer has no issuer credit rating and its senior unsecured debt is unrated by Standard & Poor's, or Inter-connection Customer has an issuer credit rating or a senior unsecured debt rating of less than investment grade as rated by Standard & Poor's, Interconnection Customer shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that Interconnection Customer is permitted to self-insure pursuant to this article, it shall notify Transmission Provider 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 LGIA.

## **Article 19. Assignment**

### **19.1 Assignment.**

This LGIA may be assigned by either Party only with the written consent of the other, provided that either Party may assign this 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 LGIA; and provided further, that Interconnection Customer shall have the right to assign this 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

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 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 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 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 (Intentionally Omitted).**

## **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 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.

#### **22.1.1 Term.**

During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this 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 LGIA; or (6) is required, in accordance with Article 22.1.7 of the LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, including the Freedom of Information Act, 5 U.S.C. § 552, as amended, or is necessary in any legal proceeding establishing rights and obligations under this 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), sub-contractors, 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 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 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 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 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 FERC, its Staff, or a State.**

Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 CFR § 1b.20, if FERC 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 LGIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the

request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this LGIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Party to the LGIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**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 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: (1) required by law; (2) 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; (3) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld; or (4) necessary to fulfill its obligations under this 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 remediate all releases of Hazardous Substances brought to, or created at, real property it owns underlying the Large Generating Facility or Interconnection Facilities, and any Hazardous Substances migrating from real property it owns at the Large Generating Facility site. The Party that caused the release shall bear the costs of the remediation, which shall meet applicable state and federal environmental standards at the time of the remediation. Such costs may include, but are not limited to, state and federal supervision, remedial action plans, removal and remedial actions, and negotiation of voluntary and judicial agreements required to meet such environmental standards.

**23.2** Each Party shall notify the other Party as promptly as practicable of any significant release of Hazardous Substances by the first Party. Each Party shall cooperate with the

other Party in accommodating any necessary remedial activities of the other Party with respect to property occupied by such other Party.

- 23.3** The Parties agree to comply fully with the substantive requirements of all applicable federal, state and local environmental laws in the performance of their obligations hereunder, and to mitigate and abate adverse environmental impacts accordingly.

## **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. Interconnection Customer shall not begin Trial Operation until such studies are completed.



#### **24.4 Information Supplementation.**

Prior to the 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. 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 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: (1) verify the costs incurred by the disclosing Party for which the other Party is responsible under this LGIA; and (2) carry out its obligations and responsibilities under this 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 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 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 LGIA.

### **25.3 Audit Rights.**

Subject to the requirements of confidentiality under Article 22 of this 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 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 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 (24) 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 LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (1) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four (24) months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (2) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four (24) 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 LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this 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 LGIA. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided however, that in no event shall Transmission Provider be liable for the actions or inactions of Interconnection Customer or its subcontractors with respect to obligations of Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this 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 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 LGIA.

**27.2 External Arbitration Procedures.**

Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two

arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations or RTO 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.

### **27.3 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 LGIA and shall have no power to modify or change any provision of this Agreement 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. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities or Network Upgrades.

### **27.4 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.**

Interconnection Customer 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 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 LGIA.

**28.1.2 Authority.**

Such Party has the right, power and authority to enter into this LGIA, to become a Party hereto and to perform its obligations hereunder. This 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 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 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 LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

**Article 29. Joint Operating Committee****29.1 Joint Operating Committee.**

Except in the case of ISOs and RTOs, Transmission Provider shall constitute a Joint Operating Committee to coordinate operating and technical considerations of Interconnection Service. At least six (6) months prior to the expected Initial Synchronization Date, Interconnection Customer and Transmission Provider shall each appoint one representative and one alternate to the Joint Operating Committee. Each Interconnection Customer shall notify Transmission Provider of its appointment in writing. Such appointments may be changed at any time by similar notice. The Joint Operating Committee shall meet as necessary, but not less than once each calendar year, to carry out the duties set forth herein. The Joint Operating Committee shall hold a meeting at the request of either Party, at a time and place agreed upon by the representatives. The Joint Operating Committee shall perform all of its duties consistent with the provisions of this LGIA. Each Party shall cooperate in providing to the Joint Operating Committee all information required in the performance of the Joint Operating Committee's duties. All decisions and agreements, if any, made by the Joint Operating Committee, shall be evidenced in writing. The duties of the Joint Operating Committee shall include the following:

**29.1.1** Establish data requirements and operating record requirements.

- 29.1.2** Review the requirements, standards and procedures for data acquisition equipment, protective equipment and any other equipment or software.
- 29.1.3** Annually review the one (1) year forecast of maintenance and planned outage schedules of Transmission Provider's and Interconnection Customer's facilities at the Point of Interconnection.
- 29.1.4** Coordinate the scheduling of maintenance and planned outages on the Interconnection Facilities, the Large Generating Facility and other facilities that impact the normal operation of the interconnection of the Large Generating Facility to the Transmission System.
- 29.1.5** Ensure that information is being provided by each Party regarding equipment availability.
- 29.1.6** Perform such other duties as may be conferred upon it by mutual agreement of the Parties.

## **Article 30. Miscellaneous**

### **30.1 Binding Effect.**

This 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.

### **30.2 Conflicts.**

In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.

### **30.3 Rules of Interpretation.**

This 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 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 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 LGIA or such Appendix to this LGIA, or such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder," "hereof," "herein," "hereto" and words of similar import shall be deemed references to this 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."

**30.4 Entire Agreement.**

This 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 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 LGIA.

**30.5 No Third Party Beneficiaries.**

Except as provided in Article 4.3.1.3, this 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.

**30.6 Waiver.**

The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this 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 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 LGIA. Termination or Default of this 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 LGIA shall, if requested, be provided in writing.

**30.7 Headings.**

The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.

**30.8 Multiple Counterparts.**

This LGIA may be executed in two (2) or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

**30.9 Amendment.**

The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by the Parties.

**30.10 Modification by the Parties.**

The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights. (Intentionally Omitted)**

**30.12 No Partnership.**

This 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.

**30.13 Signatures.**

**Signatures**

This Agreement may be executed in several counterparts, all of which taken together will constitute one single agreement, and may be executed by electronic signature and delivered electronically. The Parties have executed this Agreement as of the last date indicated below.

(INTERCONNECTION CUSTOMER NAME) UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

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

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

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

Title: Transmission Account Executive

If opting out of the electronic signature:

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

Name: \_\_\_\_\_  
(Print/Type)

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

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



**APPENDIX A to LGIA**

**INTERCONNECTION FACILITIES, NETWORK UPGRADES AND DISTRIBUTION UPGRADES**

**5. Interconnection Facilities:**

(a) [insert Interconnection Customer's Interconnection Facilities]:

(b) [insert Transmission Provider's Interconnection Facilities]:

**6. Network Upgrades:**

(a) [insert Stand Alone Network Upgrades]:

(b) [insert Other Network Upgrades]:

**7. Distribution Upgrades:**

**8. Contingent Facilities:**

**Appendix B to LGIA**

**Milestones**

**Appendix C to LGIA**  
**Interconnection Details and**  
**Operating Requirements**

**Appendix D to LGIA****Security Arrangements****Details**

Infrastructure security of Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day Transmission System reliability and operational security. FERC will expect all Transmission Providers, market participants, and Interconnection Customers interconnected to the Transmission System to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

**Appendix E to LGIA**  
**Commercial Operation**

**Date**

This Appendix E is a part of the 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 LGIA**

**Addresses for Delivery of Notices and Billings**

**Notices:**

Transmission Provider:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**Billings and Payments:**

Transmission Provider:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

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

Transmission Provider:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**Appendix G to 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 LGIA continue to apply to wind generating plant interconnections.

**B. Technical Standards Applicable to a Wind Generating Plant****i. Low Voltage Ride-Through (LVRT) Capability**

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The LVRT standard provides for a transition period standard and a post-transition period standard.

**Transition Period LVRT Standard**

The transition period standard applies to wind generating plants subject to FERC Order 661 that have either: (i) interconnection agreements signed and filed with the Commission, filed with the Commission in unexecuted form, or filed with the Commission as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generating turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

6. 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

Transmission Provider. 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.

7. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.
8. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
9. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAR Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.
10. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

#### **Post-transition Period LVRT Standard**

All wind generating plants subject to FERC Order No. 661 and not covered by the



transition period described above must meet the following requirements:

6. 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 Transmission Provider. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles 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. A wind generating plant shall remain interconnected during such a fault on the transmission system for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
7. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
8. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
9. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
10. Existing individual generator units that are, or have been, interconnected to the

network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

**ii. Power Factor Design Criteria (Reactive Power)**

A wind generating plant shall maintain a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA, if 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 (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors if agreed to by Transmission Provider, or a combination of the two. Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the System Impact Study shows this to be required for system safety or reliability.

**iii. Supervisory Control and Data Acquisition (SCADA) Capability**

The wind plant shall provide SCADA capability to transmit data and receive instructions from Transmission Provider to protect system reliability. 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.

**Appendix H to LGIA**

**Annual Operation and Maintenance Charge:**

**Monthly Operation and Maintenance Charge:<sup>3</sup>**

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<sup>3</sup> The monthly charge is one-twelfth of the annual charge.

**ATTACHMENT S****Transmission Line Ratings****General:**

The Transmission Provider will implement Transmission Line Ratings on the transmission lines over which it provides Transmission Service, as provided below.

**Definitions:**

The following definitions apply for purposes of this Attachment:

- (1) “Transmission Line Rating” means the maximum transfer capability of a transmission line, computed in accordance with a written Transmission Line Rating methodology and consistent with Good Utility Practice, considering the technical limitations on conductors and relevant transmission equipment (such as thermal flow limits), as well as technical limitations of the Transmission System (such as system voltage and stability limits). Relevant transmission equipment may include, but is not limited to, circuit breakers, line traps, and transformers.
- (2) “Ambient-Adjusted Rating” (AAR) means a Transmission Line Rating that:
  - (a) Applies to a time period of not greater than one hour.
  - (b) Reflects an up-to-date forecast of ambient air temperature across the time period to which the rating applies.
  - (c) Is calculated at least each hour, if not more frequently.
- (3) “Seasonal Line Rating” means a Transmission Line Rating that:
  - (a) Applies to a specified season, where seasons are defined by the Transmission Provider to include not fewer than four seasons in each year, and to reasonably reflect portions of the year where expected high temperatures are relatively consistent.
  - (b) Reflects an up-to-date forecast of ambient air temperature across the relevant season over which the rating applies.
  - (c) Is calculated annually, if not more frequently, for each season in the future for which Transmission Service can be requested.
- (4) “Emergency Rating” means a Transmission Line Rating that reflects operation for a specified, finite period, rather than reflecting continuous operation. An Emergency Rating may assume an acceptable loss of equipment life or other physical or safety limitations for the equipment involved.

**System Reliability:**

If the Transmission Provider reasonably determines, consistent with Good Utility Practice, that the temporary use of a Transmission Line Rating different than would otherwise be required by this Attachment is necessary to ensure the safety and reliability of the Transmission System, then the Transmission Provider may use such an alternate rating. The Transmission Provider must document in its database of Transmission Line Ratings and Transmission Line Rating methodologies on OASIS or another password-protected website, as required by this Attachment, the use of an alternate Transmission Line Rating under this paragraph, including the nature of and basis for the alternate rating, the date and time that the alternate rating was initiated, and (if applicable) the date and time that the alternate rating was withdrawn and the standard rating became effective again.

**Obligations of Transmission Provider:**

The Transmission Provider will have the following obligations.

The Transmission Provider must use AARs as the relevant Transmission Line Ratings when determining whether to make flow-based curtailments (under section 13.6) Firm Point-To-Point Transmission Service or when determining whether to curtail and/or interrupt (under section 14.7) Non-Firm Point-To-Point Transmission Service if such curtailment and/or interruption is both necessary because of issues related to flow limits on transmission lines and anticipated to occur (start and end) within 10 days of such determination. For determining whether to curtail or interrupt Point-To-Point Transmission Service in other situations, the Transmission Provider must use Seasonal Line Ratings as the relevant Transmission Line Ratings.

The Transmission Provider must use AARs as the relevant Transmission Line Ratings when determining whether to make flow-based curtailments (under section 33) or redispatch (under sections 30.5 and/or 33) Network Integration Transmission Service or secondary service if such curtailment or redispatch is both necessary because of issues related to flow limits on transmission lines and anticipated to occur (start and end) within 10 days of such determination. For determining the necessity of curtailment or redispatch of Network Integration Transmission Service or secondary service in other situations, the Transmission Provider must use Seasonal Line Ratings as the relevant Transmission Line Ratings.

The Transmission Provider must use Seasonal Line Ratings as the relevant Transmission Line Ratings when evaluating requests for and whether to curtail, interrupt, or redispatch any Transmission Service not otherwise covered above in

this section (including, but not limited to, requests for non-Near-Term Transmission Service or requests to designate or change the designation of Network Resources or Network Load), when developing any ATC or other information posted or provided to potential customers related to such services. The Transmission Provider must use

Seasonal Line Ratings as a recourse rating in the event that an AAR otherwise required to be used under this Attachment is unavailable.

The Transmission Provider must use uniquely determined Emergency Ratings for contingency analysis in the operations horizon and in post-contingency simulations of constraints. Such uniquely determined Emergency Ratings must also include separate AAR calculations for each Emergency Rating duration used.

In developing forecasts of ambient air temperature for AARs and Seasonal Line Ratings, the Transmission Provider must develop such forecasts consistent with Good Utility Practice and on a non-discriminatory basis.

Postings to OASIS or another password-protected website: The Transmission Provider must maintain on the password-protected section of its OASIS page or on another password-protected website a database of Transmission Line Ratings and Transmission Line Rating methodologies. The database must include a full record of all Transmission Line Ratings, both as used in real-time operations, and as used for all future periods for which Transmission Service is offered. Any postings of temporary alternate Transmission Line Ratings or exceptions used under the System Reliability section above or the Exceptions section below, respectively, are considered part of the database. The database must include records of which Transmission Line Ratings and Transmission Line Rating methodologies were in effect at which times over at least the previous five years, including records of which temporary alternate Transmission Line Ratings or exceptions were in effect at which times during the previous five years. Each record in the database must indicate which transmission line the record applies to, and the date and time the record was entered into the database. The database must be maintained such that users can view, download, and query data in standard formats, using standard protocols.

Sharing with Transmission Providers: The Transmission Provider must share, upon request by any Transmission Provider and in a timely manner, the following information:

- (1) Transmission Line Ratings for each period for which Transmission Line Ratings are calculated, with updated ratings shared each time Transmission Line Ratings are calculated, and
- (2) Written Transmission Line Rating methodologies used to calculate the Transmission Line Ratings in (1) above.

Exceptions: Where the Transmission Provider determines, consistent with Good Utility Practice, that the Transmission Line Rating of a transmission line is not affected by ambient air temperature or solar heating, the Transmission Provider may use a Transmission Line Rating for that transmission line that is not an AAR or Seasonal Line Rating. Examples of such a transmission line may include (but are not limited to): (1) a transmission line for which the technical transfer capability of the limiting conductors and/or limiting transmission equipment is not dependent on

ambient air temperature or solar heating; or (2) a transmission line whose transfer capability is limited by a Transmission System limit (such as a system voltage or stability limit) which is not dependent on ambient air temperature or solar heating. The Transmission Provider must document in its database of Transmission Line Ratings and Transmission Line Rating methodologies on OASIS or another password-protected website any exceptions to the requirements contained in this Attachment initiated under this paragraph, including the nature of and basis for each exception, the date(s) and time(s) that the exception was initiated, and (if applicable) the date(s) and time(s) that each exception was withdrawn and the standard rating became effective again. If the technical basis for an exception under this paragraph changes, then the Transmission Provider must update the relevant Transmission Line Rating(s) in a timely manner. The Transmission Provider must reevaluate any exceptions taken under this paragraph at least every five years.

