

**PORTLAND GENERAL ELECTRIC COMPANY**

**PRO FORMA OPEN ACCESS**

**TRANSMISSION TARIFF**

**Communications concerning this Tariff should be sent to:**

**J. Jeffrey Dudley  
Vice President & General Counsel  
Portland General Electric Company  
121 S.W. Salmon Street 1WTC-1301  
Portland, OR 97204  
Telephone: (503) 464-8000  
Facsimile: (503) 464-2200**

Portland General Electric Company  
FERC Electric Tariff  
Fourth Revised Volume No. 8

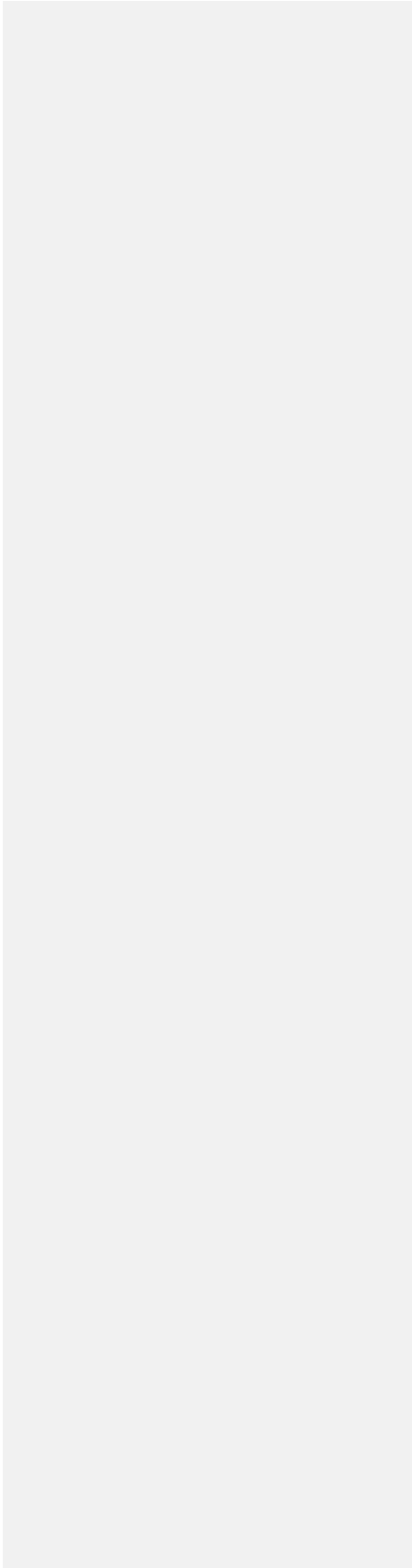
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SCHEDULE 6

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~~Vice President, Regulatory Affairs~~ ~~Issued on: August 13, 2007~~  
~~& Strategic Planning~~

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~~Fourth Revised Volume No. 8~~

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~~\_\_\_\_\_~~ Operating Reserve - Supplemental Reserve Service

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~~Vice President, Regulatory Affairs~~ ~~Issued on: August 13, 2007~~  
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~~Docket Nos. RM05-17-000 and RM05-25-000, issued February 16, 2007; 118 FERC ¶61,119~~

SCHEDULE 7

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\_\_\_\_ Generator Imbalance Service

SCHEDULE 11

\_\_\_\_ Real Power Losses

ATTACHMENT A

\_\_\_\_ Form of Service Agreement For Firm Point-To-Point Transmission Service

ATTACHMENT A-1

\_\_\_\_ Form Of Service Agreement for The Resale, Reassignment Or Transfer Of Point- To-Point Transmission Service

ATTACHMENT B

Form of Service Agreement For Short Term Firm Point-To-Point Transmission Service and Non-Firm Point-To-Point Transmission Service

ATTACHMENT C

\_\_\_\_ Methodology to Assess Available Transmission Capability~~Capability~~

A

ATTACHMENT D

\_\_\_\_ Methodology for Completing a System Impact Study

ATTACHMENT E

\_\_\_\_ Index of Point-To-Point Transmission Service Customers

ATTACHMENT F

\_\_\_\_ Service Agreement For Network Integration Transmission Service

ATTACHMENT G

\_\_\_\_ Network Operating Agreement

ATTACHMENT H

\_\_\_\_ Annual Transmission Revenue Requirement For Network Integration \_\_\_\_ Transmission Service

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ATTACHMENT L

       Creditworthiness Procedures

ATTACHMENT M

       Small Generator Interconnection Procedures (SGIP) (for Generating Facilities No  
       Larger Than 20 MW)

ATTACHMENT M-1

       Small Generator Interconnection Agreement (SGIA) (for Generating Facilities No  
       Larger Than 20 MW)

ATTACHMENT N

       Retail Network Integration Transmission Service

ATTACHMENT O

       Standard Large Generator Interconnection Procedures

ATTACHMENT O APPENDICES

       Appendix 1 - Interconnection Request for a Large Generating Facility

       Appendix 2 - Interconnection Feasibility Study Agreement

       Appendix 3 - Interconnection System Impact Study Agreement

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       Appendix 6 - Standard Large Generator Interconnection Agreement

       Appendix 7 - Interconnection Procedures for a Wind Generating Plant

ATTACHMENT P

       Energy Imbalance Market

**~~I.~~ COMMON SERVICE PROVISIONS**

**~~H.I.~~**

**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:**

**~~1.4~~1.3**

The total annual cost of the Transmission System for purposes of Network Integration Transmission Service shall be the amount specified in Attachment H until amended by the Transmission Provider or modified by the Commission.

**1.4 Application:**

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

**1.54A 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.

**1.4B6 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.”

**1.4C7 Balancing Authority Area Resource**

A resource owned by PGE, or voluntarily contracted for by PGE to provide EIM Available Balancing Capacity, that can provide regulation and load following services to enable the PGE EIM Entity to meet reliability criteria. No resource unaffiliated with the PGE EIM Entity shall be a Balancing Authority Area Resource solely on the basis of one or more of the following reasons: (1) the resource is a Designated Network Resource; (2) the resource flows on a Point-to-Point Transmission Service reservation; and/or (3) the resource is an Interconnection Customer under the Tariff.

**1.4D8 Bid Cost Recovery (BCR)**

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

**1.4E9 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.

**1.4F10 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.

**1.115 Commission:**

The Federal Energy Regulatory Commission.

**1.126 Completed Application:**

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

**1.137 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:

~~1.4.1.1~~1.13.1 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);

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~~1.4.1.2~~1.13.2 maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;

~~1.4.1.3~~1.13.3 maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and

~~1.4.1.4~~1.13.4 provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

**1.148 Curtailment:**

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

**1.159 Delivering Party:**

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

**1.160 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.

**1.171 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 and shall be subject to Commission approval.

**1.148 Dispatch Instruction**

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

**1.149 Dispatch Operating Point**

The expected operating point, in MW, of a PGE EIM Participating Resource that has received a Dispatch Instruction from the MO or a Balancing Authority Area Resource to which the PGE EIM Entity has relayed a Dispatch Instruction received from the MO. For purposes of Attachment P of this Tariff, the Dispatch Operating Point means the change, in MW output, of (i) a PGE EIM Participating Resource due to an EIM bid being accepted and the PGE 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.

#### **1.4C20 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.

#### **1.4D21 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

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EIM Area through economic bids submitted by EIM Participating Resource Scheduling Coordinators in the fifteen-minute and five-minute markets.

**1.11E22** **EIM Area**

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

**1.11E23** **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 PGE EIM Entity's Resource Plan.

**1.11G24** **EIM Entity**

A BA, other than the PGE EIM Entity, that enters into the MO's pro forma EIM Entity Agreement to enable the EIM to occur in its BAA.

**1.11H25** **EIM Transfer**

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

**1.1226** **Eligible Customer:**

- i. Any electric utility (including the Transmission Provider and any power marketer), Federal power marketing agency, or any person generating

electric energy for sale for 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 pursuant to a state requirement that the Transmission Provider offer the unbundled transmission service, or pursuant to a voluntary offer of such service by the Transmission Provider.

- ii. Any Retail End User is an Eligible Customer under the Tariff.
- iii. An Energy Services Supplier (ESS) certified by the Oregon Public Utility Commission (OPUC) to serve Retail End Users and which has executed all applicable agreements with the Transmission Provider.

**1.12A27 e-Tag**

An electronic tag associated with a schedule in accordance with the requirements of the North American Electric Reliability Corporation (NERC), the Western Electricity Coordinating Council (WECC), or the North American Energy Standards Board (NAESB).

**1.1328 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.

**1.1429 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.

**1.14A30 Flexible Ramping Constraint Product**

The costs associated with meeting a requirement, established by the MO, that may be enforced in the MO's EIM optimization to ensure that the unit commitment or dispatch of resources for intervals beyond the applicable commitment or dispatch period provide for the availability of required capacity for dispatch in subsequent real-time dispatch intervals.

**1.31 Flexible Ramping Forecasted Movement**

A resource's change in forecasted output between market intervals for purposes of Flexible Ramping Product.

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**1.32 Flexible Ramping Product Uncertainty Award**

A resource's award for meeting a Flexible Ramping Uncertainty Requirement under the Flexible Ramping Product.

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**1.33 Flexible Ramping Uncertainty Requirement**

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Flexible ramping capability to meet the Flexible Ramping Product requirements established by the MO.

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**1.14B34 Forecast Data**

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

**1.1535 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).

**1.15A36 Hourly Pricing Proxy:**

The Hourly Pricing Proxy will be the hourly Mid-Columbia Price Index published by Powerdex.

**1.15B37 Interconnection Customer**

Any Eligible Customer (or its Designated Agent) that executes an agreement to receive generation interconnection service pursuant to Attachments M or O of this Tariff.

**1.15C38 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.

**1.15D39 Instructed Imbalance Energy (IIE)**

There are three scenarios that can lead to settlement of imbalance as IIE: (1) operational adjustments of the Transmission Customer's affected Interchange or Intrachange, which includes changes by the Transmission Customer after T-57, (2) resource imbalances created by Manual Dispatch or an EIM Available Balancing Capacity dispatch, or (3) an adjustment to resource imbalances created by adjustments to resource forecasts pursuant to Section 11.5 of the MO Tariff. IIE will be settled at either the RTD or FMM price at the applicable PNode depending on the nature and timing of the imbalance.

**1.15E40 Interchange**

E-Tagged energy transfers from, to, or through the PGE BAA or other BAAs, not including EIM Transfers.

**1.15F41      Intrachange**

E-Tagged energy transfers within the PGE BAA, not including real-time actual energy flows associated with EIM Dispatch Instructions.

**1.1642 Interruption:**

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

**1.16A43      Load Aggregation Point**

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

**1.1744 Load Ratio Share:**

Ratio of a Transmission Customer's Network Load to the Transmission Provider's total load computed in accordance with Sections 34.2 and 34.3 of the Network Integration Transmission Service under Part III of the Tariff and calculated on a rolling twelve month basis.

**1.17A Locational Marginal Price (LMP)**

The marginal cost (\$/MWh) of serving the next increment of demand at that PNode consistent with existing transmission constraints and the performance characteristics of resources.

**1.1845 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.

#### **1.46 Locational Marginal Price (LMP)**

The marginal cost (\$/MWh) of serving the next increment of demand at that PNode consistent with existing transmission constraints and the performance characteristics of resources.

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#### **1.1947 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.

#### **1.19A48 Manual Dispatch**

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

#### **1.19B49 Market Operator (MO)**



The entity responsible for operation, administration, settlement, and oversight of the EIM.

**1.19C50 Measured Demand**

Includes (1) Metered Demand, plus (2) e-Tagged export volumes from the PGE BAA (excluding EIM Transfers).

**1.19D51 Metered Demand**

Metered load volumes in PGE's BAA.

**1.19E52 MO Tariff**

Those portions of the MO'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.

**1.2053 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.

**1.2154 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.

**1.2355 Network Integration Transmission Service:**

The transmission service provided under Part III of the Tariff.

**1.5623 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 an 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.

**1.5724 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.

**1.5825 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.

**1.5926 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 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 an EIM Dispatch Instruction.

**1.2760 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.

**1.2861 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.

**1.6229 Non-Firm Sale:**

An energy sale for which receipt or delivery may be interrupted for any reason or no reason, without liability on the part of either the buyer or seller.

**1.6329A Non-Participating Resource**

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

**1.3064 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.

**1.6530A Operating Hour**

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

**1.3166 Part I:**

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

**1.3267 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.

**1.3368 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.

**1.3469 Parties:**

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

**1.34A70 PGE**

Refers to Portland General Electric Company.

**1.34B71 PGE BAA**

Refers to the BAA operated by PGE.

**1.34C72 PGE BAA Transmission Owner**

A transmission owner, other than the PGE EIM Entity, who owns transmission facilities in PGE's BAA.

**1.34D73 PGE EIM Business Practice (PGE EIM BP)**

The business practice posted on PGE's OASIS that contains procedures related to PGE's implementation of EIM and the rights and obligations of Transmission Customers and Interconnection Customers related to EIM.

**1.34E74 PGE 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 P.

**1.34E75 PGE 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 pro forma EIM Entity Scheduling Coordinator Agreement.

**1.34G76 PGE EIM Participating Resource**

A resource or a portion of a resource: (1) that has been certified in accordance with Attachment P by the PGE EIM Entity as eligible to participate in the EIM; and (2) for which the generation owner and/or operator enters into the MO's pro forma EIM Participating Resource Agreement.

**1.34H77 PGE EIM Participating Resource Scheduling Coordinator**

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

**1.3478 PGE Interchange Rights Holder**

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

**1.3579 Point(s) of Delivery:**

Point(s) on the Transmission Provider's Transmission System where capacity and energy transmitted by the Transmission Provider will be made available to the Receiving Party under Part II of the Tariff. The Point(s) of Delivery shall be specified in the Service Agreement for Long-Term Firm Point-To-Point Transmission Service.

**1.3680 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 Part II of the Tariff. The Point(s) of Receipt shall be specified in the Service Agreement for Long-Term Firm Point-To-Point Transmission Service.

**1.3781 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.

**1.3882 Power Purchaser:**

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

**1.3983 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.

**1.39A84 Pricing Node (PNode)**

A single network node or subset of network nodes where a physical injection or withdrawal is modeled by the MO and for which the MO calculates an LMP that is used for financial settlements by the MO and the PGE EIM Entity.

**1.39B85 Real Power Losses**

Electrical losses associated with the use of the Transmission Provider's Transmission System and, where applicable, the use of the Transmission Provider's distribution system. Such losses are provided for in Sections 15.7 and 28.5 of the Tariff and settled financially under Schedule 11.



**1.4086 Receiving Party:**

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

**1.4187 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.

**1.4288 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.

**1.42A89 Resource Plan**

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

**1.4390 Retail Direct Access:**

Unbundled transmission service provided pursuant to the Oregon Revised Statute 757.600 – 757.691 requirement that the Transmission Provider offer transmission service, or pursuant to a voluntary offer of such service by the Transmission Provider providing Retail End-Users of electricity (or their designated agent) the ability to acquire transmission service directly from the Transmission Provider.

**1.4491 Retail End User:**

A consumer of electric energy receiving Retail Direct Access from the Transmission Provider in lieu of bundled electric service from the Transmission Provider under a retail service tariff subject to state jurisdiction.

**1.4592 Retail Network Integration Transmission Service:**

The Network Integration Service provided under Part III and Attachment N of the Tariff required to be taken by those Eligible Customers that provide direct access service to Retail End Users.

**1.4936 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.

**1.4794 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.

**1.4895 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.

**1.4996 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.

**1.5097 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.

**1.5198 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.

**1.5299 Transmission Customer:**

Any Eligible Customer (or its Designated Agent) that (i) executes a Service Agreement, or (ii) requests in writing that the Transmission Provider file with the Commission, a proposed unexecuted Service Agreement to receive transmission service 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.

**1.52A100 Transmission Customer Base Schedule**

An energy schedule that provides Transmission Customer hourly-level Forecast Data and other information that is used by the PGE 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 P) or any individual components of such schedule.

**1.53101 Transmission Provider:**

Portland General Electric Company.

**1.54102 Transmission Provider's Monthly Transmission System Peak:**

The maximum firm usage of the Transmission Provider's Transmission System in a calendar month.

**1.55103 Transmission Service:**

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

**1.56104 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.

**1.56A105 Uninstructed Imbalance Energy (UIE)**

For Non-Participating Resources in an EIM Entity BAA, the MO shall calculate UIE as either (1) the algebraic difference between the resource's 5-minute meter data and the resource component of the Transmission Customer Base Schedule, or, if applicable, (2) the 5-minute meter data and any Manual Dispatch or EIM Available Balancing Capacity dispatch. For Transmission Customers with load in the PGE EIM Entity's BAA, the PGE

EIM Entity shall calculate UIE as the algebraic difference between the Transmission Customer's actual hourly load and the Transmission Customer Base Schedule.

**1.56B106 Variable Energy Resource**

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.

**1.57107 Working Days:**

Monday through Friday, excluding any prescheduling holidays observed by the Western Electricity Coordinating Council.

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

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### **2.1 Initial Allocation of Available Transfer Capability:**

For purposes of determining whether existing capability on the Transmission Provider's Transmission System is adequate to accommodate a request for firm service under this Tariff, all Completed Applications for new firm transmission service received during the initial sixty (60) day period commencing with the effective date of the Tariff will be deemed to have been filed simultaneously. A lottery system conducted by an independent party shall be used to assign priorities for Completed Applications filed simultaneously. All Completed Applications for firm transmission service received after the initial sixty (60) day period shall be assigned a priority pursuant to Section 13.2.

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

Existing firm service customers (wholesale requirements and transmission-only, with a contract term of five years or more), have the right to continue to take transmission service from the Transmission Provider when the 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 just and reasonable rate, as approved by the Commission, 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. Service agreements subject to a right of first refusal entered into prior to August 12, 2008 or associated with a transmission service request received prior to July 13, 2007, unless terminated, will become subject to the five year/one year requirement on the first rollover date after August 12, 2008; provided that, the one-year notice requirement shall apply to such service agreement with five years or more left in their terms as of August 12, 2008.



### **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 or delivering energy from a generator located 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 or delivering energy from a generator located 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

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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 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 3.7 below list the seven 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.

**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 10.

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

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##### **4.1 Terms and Conditions:**

Terms and conditions regarding Open Access Same-Time Information System and standards of conduct are set forth in 18 CFR § 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). 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.

##### **4.2 Incorporation by Reference of the Standards Promulgated by the Wholesale Electric Quadrant of the North American Energy Standards Board:**

The current versions of the NAESB Wholesale Electric Quadrant (WEQ) Business Practice Standards incorporated by reference into the Commission's regulations as specified in Part 38 of the Commission's regulations (18 C.F.R. Part 38) are incorporated by reference into this tariff.

PGE does not provide for the following product reservations as described in the NAESB standards:

- (1) Sliding Daily (WEQ 001-2.1.6);
- (2) Sliding Weekly (WEQ 001-2.1.7);
- (3) Sliding Monthly (WEQ 001-2.1.9); and
- (4) Next Increment Hourly (WEQ 001-2.14).

PGE has the following limitations for the following product reservations as described in the NAESB standards:

- | (1) Extended Daily (WEQ 001-2.1.10), so long as the extension is in full 24-hour increments;
- | (2) Extended Weekly (WEQ 001-2.1.11), so long as the extension is in full 7-day increments;
- | (3) Extended Monthly (WEQ 001-2.1.12), so long as the extension is in full monthly increments;
- | (4) Extended Yearly (WEQ 001-2.1.13), so long as the extension is in full 12-month increments.

| 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**

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### **5.1 Transmission Providers That Own Facilities Financed by Local Furnishing Bonds:**

This provision is applicable only to Transmission Providers that have 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 Tariff, the Transmission Provider shall not be required to provide transmission service to any Eligible Customer pursuant to this Tariff if the provision of such transmission service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Transmission Provider's facilities that would be used in providing such transmission service.

### **5.2 Alternative Procedures for Requesting Transmission Service:**

- (i) If the Transmission Provider determines that the provision of transmission service requested by an Eligible 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 transmission service, it shall advise the Eligible Customer within thirty (30) days of receipt of the Completed Application.
- (ii) If the Eligible Customer thereafter renews its request for the same transmission service referred to in (i) by tendering an application under Section 211 of the Federal Power Act, the Transmission Provider, within ten (10) days of receiving a copy of the Section 211 application, will waive its rights to a request for service under Section 213(a) of the Federal Power Act

and to the issuance of a proposed order under Section 212(c) of the Federal Power Act. The Commission, upon receipt of the Transmission Provider's waiver of its rights to a request for service under Section 213(a) of the Federal Power Act and to the issuance of a proposed order under Section 212(c) of the Federal Power Act, shall issue an order under Section 211 of the Federal Power Act. Upon issuance of the order under Section 211 of the Federal Power Act, the Transmission Provider shall be required to provide the requested transmission service in accordance with the terms and conditions of this Tariff.



## **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

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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 ~~the first day of each month~~service is provided, the Transmission Provider shall submit an invoice to the Transmission Customer for the charges for all services furnished under the Tariff. ~~during the preceding month.~~ Notwithstanding the prior sentence, 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 initiate a proceeding with the Commission to terminate service but shall not terminate service until the Commission so approves any such request. 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, in accordance with Commission policy.

**7.4 Limitations on Claims:**

(a) No claim seeking an adjustment in the billing for any service, transaction, or charge under this Tariff may be asserted with respect to a month, if more than three years have elapsed since the first date upon which the billing for that month occurred, except as ordered by the Commission or a court of competent jurisdiction. The Transmission Provider may make no adjustment to billing with respect to a month for any service, transaction, or charge under this Tariff, if more than three years have elapsed since the first date upon which the billing for that month occurred, unless a claim seeking such an adjustment had been received by the Transmission Provider prior thereto, or, except as ordered by the Commission or a court of competent jurisdiction.



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

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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. Regulatory Filings**

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Nothing contained in the Tariff or any Service Agreement shall be construed as affecting in any way the right of the Transmission Provider to unilaterally make application to the Commission for a change in rates, terms and conditions, charges, classification of service, Service Agreement, rule or regulation under Section 205 of the Federal Power Act and pursuant to the Commission's rules and regulations promulgated thereunder.

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 the Federal Power Act and pursuant to the Commission's rules and regulations promulgated thereunder.

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## **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:**

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 PGE](#)



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EIM Entity performed consistent with Attachment P of this Tariff shall be gross  
negligence or intentional wrongdoing.

## 11. Creditworthiness

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

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## 12. Dispute Resolution Procedures

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For the resolution of service related disputes between the Transmission Provider and a Transmission Customer who is a member of the Western Electricity Coordinating Council (“WECC”) the dispute resolution procedure shall be pursuant to Section 12.1. For the resolution of service related disputes between the Transmission Provider and a Transmission Customer who is not a member of WECC the dispute resolution procedure shall be pursuant to Section 12.2 through 12.5.

### 12.1 Dispute Resolution Procedures for Transmission Customers who are Members of the WECC:

Any dispute which (1) is between the Transmission Provider and a Transmission Customer who is a member of the WECC and (2) involves service under this Tariff, shall be resolved in accordance with the dispute resolution provisions contained in the WECC Business and Governance Guidelines and Policies found at [www.wecc.biz](http://www.wecc.biz).

### 12.2 Internal Dispute Resolution Procedures for Transmission Customers that are not Members of the WECC:

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Any dispute between a Transmission Customer and the Transmission Provider involving transmission service under the Tariff (excluding applications for rate changes or other changes to the Tariff, or to any Service Agreement entered into under the Tariff, which shall be presented directly to the Commission for resolution) 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] by mutual agreement, such dispute may be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below.

**12.3 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.

**12.4 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 therefore. 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.

#### 12.4A EIM Disputes

##### 12.4A.1 Disputes between the PGE EIM Entity and a Transmission Customer or Interconnection Customer Related to Allocation of Charges or Payments from the MO

To the extent a dispute arises between the PGE EIM Entity and a Transmission Customer or Interconnection Customer regarding the PGE EIM Entity's implementation of this Tariff's provisions regarding the manner in which the PGE EIM Entity allocates charges or payments from the MO, the parties shall follow the dispute resolution procedures in Sections 12.1 to 12.4 of this Tariff.

##### 12.4A.2 Disputes between the MO and PGE EIM Participating Resource Scheduling Coordinators Related to EIM Charges and Payments Directly From the MO

Disputes involving settlement statements between the MO and PGE EIM Participating Resource Scheduling Coordinators shall be resolved in accordance with the dispute

resolution process of the MO Tariff. A Transmission Customer with a PGE EIM Participating Resource shall provide notice to the PGE 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 PGE EIM BP.

**12.4A.3 Disputes between the MO and the PGE EIM Entity**

The PGE 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 PGE EIM Entity submits a dispute it shall provide notice to Transmission Customers in accordance with the PGE EIM BP.

**12.4A.4 Disputes Regarding MO Charges or Payments to the PGE EIM Entity Raised by Transmission Customers or Interconnection Customers**

To the extent a dispute arises regarding a MO charge or a MO payment to the PGE EIM Entity that is subsequently charged or paid by the PGE EIM Entity to a Transmission Customer or an Interconnection Customer, and such Transmission Customer or Interconnection Customer wishes to raise a dispute with the MO, the PGE EIM Entity shall file a dispute on behalf of such Transmission Customer or Interconnection Customer in accordance with the MO Tariff and work with the Transmission Customer or the Interconnection 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 The Federal Power Act:**

Nothing in this section shall restrict the rights of any party to file a Complaint with the Commission under relevant provisions of the Federal Power Act.

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

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### **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.



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

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#### 13.1 Term:

The minimum term of Firm Point-To-Point Transmission Service shall be one day 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 System becomes oversubscribed, requests for service may preempt competing reservations up to the following conditional reservation deadlines: one Working 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.

- (iv) 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 (i) agreements executed on or after July 13, 2007 or (ii) agreements executed prior to the aforementioned date that the Commission requires to be unbundled, by the date specified by the Commission. 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 Firm 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 form of service agreement for Short Term Firm Point-To-Point Transmission Service (Attachment B) to an Eligible Customer when it first submits a Completed Application for Short-Term Firm Point-To-Point Transmission Service pursuant to the Tariff. Executed Service Agreements that contain the information required under the Tariff shall be filed with the Commission in compliance with applicable Commission regulations. An Eligible Customer that uses 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:**

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. 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 PGE's BAA in accordance with Section 6 of Attachment P.](#)

**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

— R 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. Schedule 7 specifies 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. Hour-to-hour schedules 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**

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##### **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 (i) agreements executed on or after May 14, 2007 or (ii) agreements executed prior to the aforementioned date that the Commission requires to be unbundled, by the date specified by the Commission. 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 B) to an Eligible Customer when it first submits a Completed Application for Non-Firm Point-To-Point Transmission Service

pursuant to the Tariff. Executed Service Agreements that contain the information required under the Tariff shall be filed with the Commission in compliance with applicable Commission regulations.

**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. Schedule 8 specifies 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 or uses Transmission Service at a Point of Receipt or Point of Delivery that it has not reserved. 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 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.

**14.7 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 and indirectly interconnected with Transmission Provider's Transmission System. 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 will take necessary measures to ensure reliability in PGE's BAA in accordance with Section 6 of Attachment P.](#)

## 15. Service Availability

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### 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.

### 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 file with the Commission, within thirty (30) days after the date the Transmission Customer provides written notification directing the Transmission Provider to file, an unexecuted Point-To-Point Service Agreement containing terms and conditions deemed appropriate by the Transmission Provider for such requested Transmission Service. The Transmission Provider shall commence providing Transmission Service subject to the Transmission Customer agreeing to (i) compensate the Transmission Provider at whatever rate the



Commission ultimately determines to be just and reasonable, and (ii) comply with the terms and conditions of the Tariff including posting appropriate security deposits in accordance with the terms of Section 17.3.

**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.
- (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 offer the Firm Transmission Service with the  
condition that 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 Condition(s). 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 on file with the Commission may continue to receive transmission service under those agreements until such time as those agreements may be modified by the Commission.

**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~~shall compensate Transmission Provider for ~~replacing~~ losses associated with all transmission service as ~~calculated by the Transmission Provider~~provided in Schedule 11. The applicable Real Power Loss factors are as follows: 2.0 percent over the Pacific Northwest-Pacific Southwest (PNW-PSW) AC Intertie, 3.0 percent over the Colstrip transmission line and 1.6 percent for all other service over PGE's integrated transmission grid.

## **16. Transmission Customer Responsibilities**

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### **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 Section 11;
- (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; and
- (f) The Transmission Customer has executed a Point-To-Point Service Agreement or has agreed to receive service pursuant to Section 15.3.

(g) The Transmission Customer must comply with the requirements of Attachment P 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**

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**17.1 Application:**

A request for Firm Point-To-Point Transmission Service for periods of one year or longer must contain a written Application to: Administrator, Transmission & Reliability Services, Portland General Electric Company, 121 SW Salmon Street, Portland, Oregon 97204, 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. This will provide a time-stamped record for establishing the priority of the Application.

**17.2 Completed Application:**

A Completed Application shall provide all of the information included in 18 CFR 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; and
- (x) Any additional information required by the Transmission Provider's planning process established in Attachment K.

The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 358 of the Commission's regulations.

**17.3 Deposit:**

A Completed Application for Firm Point-To-Point Transmission Service also shall include a deposit of either one month's charge for Reserved Capacity or the full charge for Reserved Capacity for service requests of less than one month. 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), said deposit shall be returned with interest less any reasonable costs incurred by the Transmission Provider in connection with the review of the losing bidder's Application. The deposit also will be returned with interest less any reasonable costs incurred by the Transmission Provider 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 deposit shall be refunded in full, with interest, less reasonable costs incurred by the Transmission Provider to the extent such



costs have not already been recovered by the Transmission Provider from the Eligible Customer. The Transmission Provider will provide to the Eligible Customer a complete accounting of all costs deducted from the refunded deposit, which the Eligible Customer may contest if there is a dispute concerning the deducted costs. 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, with interest, will be returned to the Transmission Customer upon expiration or termination of the Service Agreement for Firm Point-To-Point Transmission Service. Applicable interest shall be computed in accordance with the Commission's regulations at 18 CFR 35.19a(a)(2)(iii), and shall be calculated from the day the deposit check is credited to the Transmission Provider's account.

**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, with interest. 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 either (i) if it will be able to provide service without performing a System Impact Study or (ii) if such a study is needed to evaluate the impact of the Application pursuant to Section 19.1. 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.

**17.6 Execution of Service Agreement:**

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 will govern the execution of a Service Agreement. Failure of an Eligible Customer to execute and return the Service Agreement or request the filing of an unexecuted 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 with interest. 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 within 15 days of notifying the Transmission Provider it intends to extend the commencement of service.

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**

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**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 CFR § 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 noon the Working Day before service is to commence. Requests for service received later than 2:00 p.m. prior to the Working Day service is scheduled to commence will be accommodated if practicable.

**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) Working Days for monthly service.

**19. Additional Study Procedures For Firm Point-To-Point Transmission Service Requests**

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**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. 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. The Transmission Provider shall within thirty (30) days of receipt of a Completed Application, 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, pursuant to Section 17.3, shall be returned with interest.

**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. 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 the filing of an unexecuted 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 its deposit, pursuant to Section 17.3, shall be returned with interest. 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 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 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. The Eligible Customer shall have thirty (30) days to execute a Service Agreement or request the filing of an unexecuted Service Agreement 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 Clustering Transmission Service Request Studies:**

- (i) The Transmission Provider will study transmission service requests in a cluster if the Eligible Customers involved request the cluster and the Transmission Provider can reasonably accommodate the request. A request to study a transmission service request in a cluster must be made prior to execution of the System Impact Study Agreement. Neither a request to study transmission service requests in a cluster nor a request to

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opt out of a cluster will change the queue position of any of the Eligible Customers who participate in a cluster unless the Eligible Customer's transmission service request is deemed to be withdrawn.

•(ii) The Transmission Provider may, in its discretion, notify the Eligible Customers who have submitted transmission service requests about potential clustering opportunities. If a request to study transmission service requests in a cluster is submitted by only one customer, the Transmission Provider will ask other comparably situated Eligible Customers (e.g., Eligible Customers with comparable physical location, paths, etc.) in the transmission request queue whether they want to participate in the requested cluster studies. If no other customers wish to join the requested cluster studies, the Eligible Customer requesting such studies will be notified that no other Eligible Customers are interested in participating in the cluster studies and that the Eligible Customer's studies will proceed on a stand-alone basis.

•(iii) The Transmission Provider will accommodate any reasonable clustering request. Among the factors that the Transmission Provider will consider are the following:

- a. The cluster is not supported by all Eligible Customers proposed to be in the cluster;
- b. The Transmission Provider determines that the requests should be studied individually rather than in a cluster (e.g., studies are

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geographically diverse or otherwise impact the transmission system in diverse ways such that clustering is not reasonable); or

•c. In the Transmission Provider's discretion, the Transmission Provider determines that granting the clustering request is likely to cause the Transmission Provider to miss any deadline set forth in this Tariff.

•(iv) All Eligible Customers involved in a cluster study will be required to execute individual System Impact Study Agreements which provide that the System Impact Study will be performed as a cluster study. The study will be performed in accordance with the procedures set forth in Section 19.3 with the exception that the timelines for performing the System Impact Study will begin to run after all Eligible Customers who have notified the Transmission Provider of their intent to participate in a cluster study have executed a System Impact Study Agreement. Clustered requests will be jointly modeled during the System Impact Study to allow for more efficient design solutions, identify any transmission system upgrades necessary, and include potential counterflows created by the cluster of request.

•(v) Once the System Impact Study is complete, the Transmission Provider will tender a Facilities Study Agreement to each Eligible Customer. Each Facilities Study Agreement will require that the Facilities Study be performed as a cluster study. An Eligible Customer may choose to have its Facilities Study performed on an individual basis if it notifies the

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Transmission Provider and other participants of the cluster within seven (7) days of receipt of the Facilities Study Agreement that it elects to have its Facilities Study performed on an individual basis. The procedures in Section 19.4 will apply subject to the conditions in paragraph (vii) of this Section with the exception that the timeline for performing the Facilities Study will begin to run after all Eligible Customers in the cluster have executed a Facilities Study Agreement.

• (vi) Once Eligible Customers agree to have the Transmission Provider cluster their System Impact Study or Facilities Study, the Eligible Customers may request to opt out of the cluster. The Transmission Provider will not grant any request to opt out of a cluster if, in the Transmission Provider's discretion, the Transmission Provider determines that granting the request to opt out of the cluster is likely to cause the Transmission Provider to miss any deadline set forth in this Tariff.

• (vii) If a request to opt out of a clustered System Impact Study or Facilities Study is granted, or if an Eligible Customer elects not to execute a Facilities Study Agreement in a cluster, the Transmission Provider will evaluate the impact of the withdrawal from the cluster and may revise, in the Transmission Provider's discretion, the cluster process and study results accordingly. The Transmission Provider may determine, in its discretion, that restudy or revision of the System Impact Study or Facilities Study is necessary for the Eligible Customer that opted out of

the cluster and/or for the remaining participants in the cluster. As a result, the Transmission Provider may determine, in its discretion, that additional time may be required to complete the study process and will provide all affected Eligible Customers with written notification of the delay along with a good faith estimate of the revised date of completion. If modifications to a System Impact Study are required as a result of an Eligible Customer opting out of a cluster, the Transmission Provider will, upon notification to the affected customer(s), make such modifications pursuant to the original System Impact Study Agreement(s). All affected Eligible Customers may request to opt out of the cluster according to the terms of this Section 19.5.

- (viii) The costs to perform a clustered System Impact Study or Facilities Study will be allocated equally amongst the Eligible Customers in the cluster unless the Eligible Customers in the cluster independently agree to an alternative cost-sharing structure, in which case the Eligible Customers shall provide the Transmission Provider with a copy of the executed cost-sharing agreement. An Eligible Customer who has opted out of a cluster remains responsible for its portion of the costs of the original clustered study in addition to any costs of restudy necessary to accommodate its request on a stand-alone basis. Similarly, if as a result of an Eligible Customer opting out of the cluster, restudy of the original System Impact Study is necessary to accommodate the requests of the remaining Eligible

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Customers in the cluster, those customers are responsible for their portion of any costs associated with restudy.

**19.6 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.



**19.7 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.

**19.8 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.

**19.9 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.

**19.10 Penalties for Failure to Meet Study Deadlines:**

Sections 19.3 and 19.4 require a Transmission Provider to use due diligence to meet 60-day study completion deadlines for System Impact Studies and Facilities Studies.

- (i) The Transmission Provider is required to file a notice with the Commission in the event that more than twenty (20) percent of non Affiliates' System Impact Studies and Facilities Studies completed by the Transmission Provider in any two consecutive calendar quarters are not completed within the 60-day study completion deadlines. Such notice must be filed within thirty (30) days of the end of the calendar quarter triggering the notice requirement.

(ii) For the purposes of calculating the percent of non-Affiliates' System Impact Studies and Facilities Studies processed outside of the 60-day study completion deadlines, the Transmission Provider shall consider all System Impact Studies and Facilities 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. The Transmission Provider may provide an explanation in its notification filing to the Commission if it believes there are extenuating circumstances that prevented it from meeting the 60-day study completion deadlines.

(iii) The Transmission Provider is subject to an operational penalty if it completes ten (10) percent or more of non-Affiliates' System Impact Studies and Facilities Studies outside of the 60-day study completion deadlines for each of the two calendar quarters immediately following the quarter that triggered its notification filing to the Commission. The operational penalty will be assessed for each calendar quarter for which an operational penalty applies, starting with the calendar quarter immediately following the quarter that triggered the Transmission Provider's notification filing to the Commission. The operational penalty will continue to be assessed each quarter until the Transmission Provider completes at least ninety (90) percent of all non-Affiliates' System Impact Studies and Facilities Studies within the 60-day deadline.

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- (iv) For penalties assessed in accordance with subsection (iii) above, the penalty amount for each System Impact Study or Facilities Study shall be equal to \$500 for each day the Transmission Provider takes to complete that study beyond the 60-day deadline.

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

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**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 or it may refer the dispute to the Commission for resolution.

**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 with interest pursuant to Commission regulations 35.19a(a)(2)(iii). 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**

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**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 or it may refer the dispute to the Commission for resolution.

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## 22. Changes in Service Specifications

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### 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.

**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**

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**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 Reseller and the Assignee.

(b) A resale temporarily conveys the scheduling rights associated with the points of delivery and receipt of a Firm or Non-Firm Point-to-Point Transmission Service Reservation from the Reseller to the Assignee for a specified duration. A transfer permanently conveys all of the rights and obligations of a Firm or Non-Firm Point-to-Point Transmission Service Reservation for all or a portion of the capacity of a reservation from the Reseller to the Assignee.

(c) The Assignee must execute a service agreement with the Transmission Provider governing reassignments of transmission service prior to the date on which the reassignment service commences. Except in the case of a transfer, the Transmission Provider shall charge the Reseller, as appropriate, at the rate stated in the Reseller's Service Agreement with the Transmission Provider or the associated OASIS schedule and credit the Reseller with the price reflected in the Assignee's Service Agreement with the Transmission Provider or the associated

OASIS schedule; provided that, such credit shall be reversed in the event of non-payment by Assignee. 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.

Resales may not be transferred. The conveyance of transferred rights is not complete until the Transmission Provider approves the transfer. The Transmission Provider shall not unduly withhold such approval. Confirmation of a transfer of transmission rights shall permanently convey all rights and obligations under the Transmission Provider's tariff from the Reseller to the Assignee, including the financial obligation, rates and terms of the original Service Agreement to the Transmission Provider.

**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 Points(s)**

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**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.

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**26. Stranded Cost Recovery**

The Transmission Provider may seek to recover stranded costs from the Transmission Customer pursuant to this Tariff in accordance with the terms, conditions and procedures set forth in FERC Order No. 888. However, the Transmission Provider must separately file any specific proposed stranded cost charge under Section 205 of the Federal Power Act.

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

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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

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#### 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.

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

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### **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 P 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 shall compensate Transmission Provider for is responsible for replacing losses associated with all transmission service as provided in Schedule 11, calculated by the Transmission Provider. The applicable Real Power Loss factors are as follows: 2.0 percent over the Pacific Northwest-Pacific Southwest (PNW-PSW) AC Intertie, 3.0 percent over the Colstrip transmission line and 1.6 percent for all other service over PGE's integrated transmission grid.

#### **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**

Portland General Electric Company

PERC Electric Tariff

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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 PGE 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

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### 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 file a proposed unexecuted Service Agreement with the Commission, and (iv) the Eligible Customer executes a Network Operating Agreement with the Transmission Provider pursuant to Attachment G, or requests in writing that the Transmission Provider file a proposed unexecuted Network Operating Agreement.

### 29.2 Application Procedures:

An Eligible Customer requesting service under Part III of the Tariff must submit 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. 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, with the earliest Application receiving the highest priority. Applications should be submitted by entering the information listed below on the Transmission Provider's OASIS. This will provide a time-stamped record for establishing the service priority of the Application. A Completed Application shall provide all of the information included in 18 CFR § 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
  - 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 sale 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; and

- (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 P](#).

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 358 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:**

The Transmission Provider will file Service Agreements with the Commission in compliance with applicable Commission regulations.

**30. Network Resources**

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**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. For purposes of temporary termination under Section 30.3, all or part of such generation associated with a NERC-registered Point of Receipt, behind which there are not transmission constraints, may be treated as a single Network Resource. Network Resources may not include 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 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 P.](#) 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 sale 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 or where appropriate, identification of the NERC-registered Point of Receipt to which Network Resources are assigned and the capacity 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 Non-Firm Sales 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 [PGE 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, the redispatch of resources pursuant to this section shall be 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:**

The Network Customer that owns existing transmission facilities that are integrated with the Transmission Provider's Transmission System may be eligible to receive consideration either through a billing credit or some other mechanism. In order to receive such consideration the Network Customer must demonstrate that its transmission facilities are integrated into the plans or operations of the Transmission Provider, to serve its power and transmission customers. For facilities added by the Network Customer subsequent to the May 14, 2007, the Network Customer shall receive credit for such transmission facilities added if such facilities are integrated into the operations of the Transmission Provider's facilities; provided however, the Network Customer's

transmission facilities shall be presumed to be integrated if such transmission facilities, if owned by the Transmission Provider, would be eligible for inclusion in the Transmission Provider's annual transmission revenue requirement as specified in Attachment H. Calculation of any credit under this subsection shall be addressed in either the Network Customer's Service Agreement or any other agreement between the Parties.

**31. Designation of Network Load**

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**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 in accordance with Commission policies.

**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**

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**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. 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. In such cases, the Transmission Provider shall within thirty (30) days of receipt of a Completed Application, 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 with interest.

**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 associated with the performance of that study shall be allocated equally amongst 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. 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 the filing of an unexecuted Service Agreement, 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 with interest. 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. The Eligible Customer shall have thirty (30) days to execute a Service Agreement or request the filing of an unexecuted Service Agreement 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 Clustering Transmission Service Request Studies:**

- (i) The Transmission Provider will study transmission service requests in a cluster if the Eligible Customers involved request the cluster and the Transmission Provider can reasonably accommodate the request. A request to study a transmission service request in a cluster must be made prior to execution of the System Impact Study Agreement. A request to study transmission service requests in a cluster will not change the queue position of any of the Eligible Customers included in the resulting studies.
- (ii) If a request to study transmission service requests in a cluster is submitted by only one customer, the Transmission Provider will ask other comparably situated Eligible Customers (e.g., Eligible Customers with comparable physical location, paths, etc.) in the transmission request

queue whether they want to participate in the requested cluster studies. If no other customers wish to join the requested cluster studies, the Eligible Customer requesting such studies will be notified that no other Eligible Customers are interested in participating in the cluster studies and that the Eligible Customer's studies will proceed on a stand-alone basis.

(iii) All Eligible Customers involved in a cluster study will be required to execute individual System Impact Study Agreements which provide that the System Impact Study will be performed as a cluster study. The study will be performed in accordance with the procedures set forth in Section 19.3 with the exception that the timelines for performing the System Impact Study will begin to run after all Eligible Customers who have notified the Transmission Provider of their intent to participate in a cluster study have executed a System Impact Study Agreement. Clustered requests will be jointly modeled during the System Impact Study to allow for more efficient design solutions, identify any transmission system upgrades necessary, and include potential counterflows created by the cluster of request.

(iv) Once the System Impact Study is complete, the Transmission Provider will tender a Facilities Study Agreement to each Eligible Customer. Each Facilities Study Agreement will require that the Facilities Study be

performed as a cluster study. The procedures in Section 19.4 and 19.5 will apply.

- (v) The costs to perform a clustered System Impact Study or Facilities Study will be allocated equally amongst the Eligible Customers in the cluster except as otherwise provided in Section 19.5(viii).

**32.6 Penalties for Failure to Meet Study Deadlines:**

Section 19.10 defines penalties that apply for failure to meet the 60-day study completion due diligence deadlines for System Impact Studies and Facilities Studies under Part II of the Tariff. These same requirements and penalties apply to service under Part III of the Tariff.

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

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#### **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 will 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 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 least-cost redispatch procedures 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 Load Ratio Shares.

**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 Load Ratio Shares. 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.

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#### **34. Rates and Charges**

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The Network Customer shall pay the Transmission Provider for any Direct Assignment Facilities, Ancillary Services, and applicable study costs, consistent with Commission policy. A Network Customer required to take Retail Network Integration Transmission Service shall also pay charges as set out in Attachment O. A Network Customer not required to take Retail Network Integration Transmission Service shall also pay:

##### **34.1 Monthly Demand Charge:**

The Network Customer shall pay a monthly Demand Charge, which shall be determined by multiplying its Load Ratio Share times one twelfth (1/12) of the Transmission Provider's Annual Transmission Revenue Requirement specified in Attachment H.

##### **34.2 Determination of Network Customer's Monthly Network Load:**

The Network Customer's monthly Network Load is its hourly load (including its designated Network Load not physically interconnected with the Transmission Provider under Section 31.3) coincident with the Transmission Provider's Monthly Transmission System Peak.

##### **34.3 Determination of Transmission Provider's Monthly Transmission System Load:**

The Transmission Provider's monthly Transmission System load is the Transmission Provider's Monthly Transmission System Peak minus the coincident peak usage of all Firm Point-To-Point Transmission Service customers pursuant to Part II of this Tariff plus the Reserved Capacity of all Firm Point-To-Point Transmission Service customers.

**34.4 Redispatch Charge:**

The Network Customer shall pay a Load Ratio Share of any redispatch costs allocated between the Network Customer and the Transmission Provider pursuant to Section 33. To the extent that the Transmission Provider incurs an obligation to the Network Customer for redispatch costs in accordance with Section 33, such amounts shall be credited against the Network Customer's bill for the applicable month.

**34.5 Stranded Cost Recovery:**

The Transmission Provider may seek to recover stranded costs from the Network Customer pursuant to this Tariff in accordance with the terms, conditions and procedures set forth in FERC Order No. 888. However, the Transmission Provider must separately file any proposal to recover stranded costs under Section 205 of the Federal Power Act.

## **35. Operating Arrangements**

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### **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, (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 Transmission Provider shall not unreasonably refuse to accept contractual arrangements with another entity for Ancillary Services. The Network Operating Agreement characteristics are 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.

**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 rates set forth below. 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.

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Charge per MW-year	\$149.89
Charge per MW-month	\$12.49
Charge per MW-week	\$2.88
Charge per MW-day	\$0.41
Hourly Charge per MW	\$0.017

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**SCHEDULE 1A**

**EIM Administrative Service**

This service recovers the administrative costs assessed by the CAISO as the MO of the EIM to the PGE EIM Entity in accordance with Sections 4.5.1.1.4, 4.5.1.3, 11.22.8, and 29.11(i) of the MO Tariff (EIM Administrative Costs). All Transmission Customers purchasing Long-Term Firm Point-to-Point Transmission Service, Short-Term Firm Point-to-Point Transmission Service, Non-Firm Point-to-Point Transmission Service, or Network Integration Transmission Service from the Transmission Provider shall be required to acquire EIM Administrative Service from the Transmission Provider.

EIM Administrative Costs assigned to the PGE EIM Entity shall be sub-allocated to Transmission Customers on the basis of Measured Demand for the month in which the EIM Administrative Costs were incurred.

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## SCHEDULE 2

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

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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 rates set forth below for transactions in the Transmission Provider's Control Area.

To the extent a Control Area operator that is not the Transmission Provider performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-

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through of the costs charged to the Transmission Provider by the Control Area operator, and in the event that the Control Area operator has not established a separate charge for this service, the Transmission Provider will not pass any cost for this service through to the Transmission Customer.

**Reactive Supply and Voltage Control from Generation Sources Service Charges:**

Per year per kW of Reserved Capacity	\$0.461
Per month per kW of Reserved Capacity	\$0.0384
Per week per kW of Reserved Capacity	\$0.0089
Per Peak day per kW of Reserved Capacity	\$0.0015
Per Off-Peak day per kW of Reserved Capacity	\$0.0013
Per Peak hour per MWh of Reserved Capacity	\$0.0924
Per Off-Peak hour per MWh of Reserved Capacity	\$0.0526

The peak period for daily service shall be all hours Monday through Saturday, excluding Western Electric Coordinating Council ("WECC") holidays. The peak period for hourly service shall be the sixteen hours from 6:00 a.m. to 10 p.m., Monday through Saturday, excluding WECC holidays.

**Excess VAR charge:**

1.) A Transmission Customer shall not be assessed an additional charge for reactive power as long as the monthly power factor, measured during any hour that the amount of scheduled power is at the maximum, is greater than or equal to ninety-five percent (95%) leading or lagging.

The Transmission Customer shall be assessed an additional charge, as provided below, for excess reactive power if the monthly power factor measured during any hour that the amount of scheduled power is at the maximum, is less than ninety-five percent (95%) leading or lagging.

Excess kVAR = Metered kVAR - 0.3287 x metered kW where metered kVAR and metered kW are measured during the same hour, and the excess kVAR shall be the greatest amount occurring during any hour(s) of a month that the metered kW is at the maximum. The amount of excess reactive power shall be the sum of excess kVAR amounts occurring at each Point of Receipt and Delivery within PGE's Control Area. Unit Cost [if less than ninety-five percent (95%) leading or lagging] = \$326.47 per excess MVAR per month.

### 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 are

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set forth below. 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 purchasing Regulation and Frequency Response Service will be required to purchase an amount of reserved capacity equal to 1.3% of the Transmission Customer's Reserved Capacity for Point-to-Point Transmission Service or 1.3% of the Transmission Customer's Network Load responsibility for Network Integration Transmission Service. The billing determinants for this service shall be reduced by any portion of the 1.3% purchase obligation that a Transmission Customer obtains from third parties or supplies itself.

The rate for long-term Regulation and frequency Response Service shall be up to \$ 6.695 per kW per month.

The rate for short-term weekly Regulation and Frequency Response Service shall be up to \$1.545 per kW-week.

The rate for short-term on-peak Regulation and Frequency Response Service shall be up to \$0.257 per kW-day.

The rate for short-term off-peak Regulation and Frequency Response Service shall be up to \$0.221 per kW-day.

Hourly rates for Regulation and Frequency Response Service shall be up to \$16.09/ MWh for on-peak service and up to \$9.17/ MWh for off-peak service.

The peak period for daily service shall be all hours Monday through Saturday, excluding WECC holidays. The peak period for hourly service shall be the sixteen hours from 6:00 a.m. to 10 p.m., Monday through Saturday, excluding WECC holidays.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the weekly rate specified above times the highest amount in kilowatts of Reserved Capacity in any day during such week. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the daily rate specified above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the weekly rate specified above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.

#### SCHEDULE 4

##### Energy Imbalance Service

(a) 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 single hour. For purposes of calculating the actual delivery of energy, the Transmission Provider shall include meter losses in this calculation when the metering occurs on the lower-voltage side of the transformer. 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 Transmission Provider may charge a Transmission Customer a penalty for either hourly energy imbalances under this Schedule or a penalty for hourly generator imbalances under Schedule 10 for imbalances occurring during the same hour, but not both unless the imbalances aggravate rather than offset each other.~~

(a) \_\_\_\_\_

(b) A Transmission Customer shall be charged or paid for Energy Imbalance Service measured as the deviation of the Transmission Customer's metered load compared to the load component of the Transmission Customer Base Schedule (as determined pursuant to Section

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~~4.2.4 of Attachment P of this Tariff) settled as UIE for the period of the deviation at the applicable LAP price where the load is located, as determined by the MO under Section 29.11(b)(3)(C) of the MO Tariff.~~

~~(e) — Energy imbalances will be subject to charges as specified below. The amount of energy imbalance shall be calculated separately for each hour and settlements will occur on a cash basis for each hour's imbalances. Hourly imbalance charges between the Transmission Provider and the Transmission Customer will be net billed for the billing period.~~

~~(d) — An Energy Imbalance Cost (EIC) shall be determined for each hour.~~

~~1) The EIC will be equal to the market price of energy for each hour calculated pursuant to this Section (c)(1). The hourly EIC will be based upon the hourly Mid-Columbia Price Index published by Powerdex.~~

~~2) When the EIC is positive for an hour, (a) PGE will pay the Transmission Customer for excess energy scheduled by the Customer in that hour or (b) the Transmission Customer shall pay PGE for any shortfall in energy scheduled by the Customer in that hour.~~

~~3) When the EIC is negative for an hour, (a) the Transmission Customer will pay PGE for excess energy scheduled by the Customer in that hour or (b) PGE shall pay the Transmission Customer for any shortfall in energy scheduled by the Customer in that hour.~~

~~(e) — The charges for Energy Imbalance Service are set forth below:~~

~~1) — The Transmission Provider shall establish a deviation band of +/- 5.0 percent (with a minimum of 2 MW) of the scheduled transaction to be applied hourly to any energy imbalance that occurs as a result of the Transmission Customer's scheduled transaction(s).~~

~~2) When the EIC is positive:~~

~~A. Within the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:~~

- ~~1. PGE shall pay the Transmission Customer at a rate equal to 100% of PGE's hourly EIC at the time of each over-scheduled hour.~~
- ~~2. The Transmission Customer shall pay PGE at a rate equal to 100% of PGE's hourly EIC at the time of each under-scheduled hour.~~

~~B. Outside the deviation band, but within a variance of +/- 25%, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:~~

- ~~1. PGE shall pay the Transmission Customer at a rate equal to 90% of PGE's hourly EIC at the time of each over-scheduled hour.~~
- ~~2. The Transmission Customer shall pay PGE at a rate equal to 110% of PGE's hourly EIC at the time of each under-scheduled hour.~~

~~C. Any deviation between hourly scheduled energy and actual delivery of energy exceeding +/- 25%, shall be repaid as a cash settlement as follows:~~

- ~~1. PGE shall pay the Transmission Customer at a rate equal to 75% of PGE's hourly EIC at the time of each over-scheduled hour.~~
- ~~2. The Transmission Customer shall pay PGE at a rate equal to 125% of PGE's hourly EIC at the time of each under-scheduled hour.~~

~~3) When the EIC is negative:~~

~~A. Within the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:~~

- ~~1. PGE shall pay the Transmission Customer at a rate equal to 100% of the absolute value of PGE's hourly EIC at the time of each under-scheduled hour.~~
- ~~2. The Transmission Customer shall pay PGE at a rate equal to 100% of the absolute value of PGE's hourly EIC at the time of each over-scheduled hour.~~

~~B. Outside the deviation band, but within a variance of +/- 25%, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:~~

- ~~1. PGE shall pay the Transmission Customer at a rate equal to 90% of the absolute value of PGE's hourly EIC at the time of each under-scheduled hour.~~
- ~~2. The Transmission Customer shall pay PGE at a rate equal to 110% of the absolute value of PGE's hourly EIC at the time of each over-scheduled hour.~~

~~C. Any deviation between hourly scheduled energy and actual delivery of energy exceeding +/- 25% shall be repaid as a cash settlement as follows:~~

~~1. PGE shall pay the Transmission Customer at a rate equal to 75% of the absolute value of PGE's hourly EIC at the time of each under-scheduled hour.~~

~~2. The Transmission Customer shall pay PGE at a rate equal to 125% of the absolute value of PGE's hourly EIC at the time of each over-scheduled hour.~~

~~(f) Crediting Mechanism. Excess charges and under payments for energy imbalance and generation imbalance service provided outside the +/- 5.0 percent deviation bands established in Schedules 4 and 10 and outside the +/- 7.5 percent deviation band in Schedule 4R of the Tariff shall be referred to as Penalty Charges. PGE will distribute revenue received from such Penalty Charges as follows:~~

~~1) Revenue from Penalty Charges will be distributed based upon energy imbalance calculations for each hour of a month.~~

~~2) An Offending Customer is one which has incurred Penalty Charges.~~

~~3) — A Non-offending Customer is one which has not incurred Penalty Charges during the same hour as the Offending Customer(s).~~

~~4) — For each hour, in which there is one or more Offending Customer, the revenues from Penalty Charges will be allocated as follows:~~

~~A. — The sum of the revenues from Penalty Charges incurred by the Offending Customers will be distributed among all of the Non-offending Customers according to the percentage of power delivered to the Non-offending Customer's load or from the Non-offending Customer's generation that hour.~~

~~B. — The hourly distributions of revenues from Penalty Charges will be credited to the Non-offending Customers.~~

## SCHEDULE 4-R

### Retail Energy Imbalance Service

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This schedule provides Energy Imbalance Service to Transmission Customers providing Retail Direct Access.

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(a) 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 single hour. 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 Energy Imbalance 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.

(b) Energy imbalances will be subject to charges as specified below. The amount of energy imbalance shall be calculated separately for each hour and settlements will occur on a cash basis for each hour's imbalances. Hourly imbalance charges between the Transmission Provider and the Transmission Customer will be net billed for the billing period.

~~(e) A Transmission Customer shall be charged or paid for Energy Imbalance Service measured as the deviation of the Transmission Customer's metered load compared to the load component of the Transmission Customer Base Schedule corresponding to the Transmission Customer's load (as determined pursuant to Section 4.2.4 of Attachment P of this Tariff) settled as UIE for the period of the deviation at the applicable LAP price where the load is located, as determined by the MO under Section 29.11(b)(3)(C) of the MO Tariff.~~ ~~An Energy Imbalance Cost~~



~~(EIC) shall be determined for each hour.~~

~~(d) —~~

~~(e) — The EIC will be equal to the market price of energy for each hour calculated pursuant to this Section (e)(1). The hourly EIC will be based upon the hourly Mid-Columbia Price Index published by Powerdex.~~

~~(f) — When the EIC is positive for an hour, (a) PGE will pay the Transmission Customer for excess energy delivered by the Customer in that hour or (b) the Transmission Customer shall pay PGE for any shortfall in energy delivered by the Customer in that hour.~~

~~(g) — When the EIC is negative for an hour, (a) PGE will pay the Transmission Customer for any shortfall in energy delivered by the Customer in that hour or (b) the Transmission Customer shall pay PGE for excess energy delivered by the Customer in that hour.~~

~~(h) —~~

~~(i) —~~

~~(j) — The charges for Energy Imbalance Service are set forth below:~~

~~(k) —~~

~~(l) — The Transmission Provider shall establish a deviation band of +/- 7.5 percent (with a minimum of 2 MW) of the scheduled transaction to be applied hourly to any energy imbalance that occurs as a result of the Transmission Customer's scheduled transaction(s).~~

~~(m) —~~

~~(n) —~~

~~(o) — When the EIC is positive:~~

~~(p) —~~

~~(q) —~~

~~(r) —~~

~~(s) — Within the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:~~

~~(t) —~~

~~(u) —~~

~~(v) — PGE shall pay the Transmission Customer at a rate equal to 100% of PGE's hourly EIC at the time of each over-scheduled hour.~~

~~(w) — The Transmission Customer shall pay PGE at a rate equal to 100% of PGE's hourly EIC at the time of each under-scheduled hour.~~

~~(x) Outside the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:~~

~~(y) —~~

~~(z) —~~

~~(aa) PGE shall pay the Transmission Customer at a rate equal to 90% of the PGE's hourly EIC at the time of each over-scheduled hour.~~

~~(bb) The Transmission Customer shall pay PGE at a rate equal to 110% of the PGE's hourly EIC at the time of each under-scheduled hour.~~

~~(cc) — When the EIC is negative:~~

~~(dd) —~~

~~(ee) —~~

~~(ff) —~~

~~(gg) — Within the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:~~

~~(hh) —~~

~~(ii) —~~

~~(jj) — PGE shall pay the Transmission Customer at a rate equal to 100% of the absolute value of PGE's hourly EIC at the time of each under-scheduled hour.~~

~~(kk) — The Transmission Customer shall pay PGE at a rate equal to 100% of the absolute value of PGE's hourly EIC at the time of each over-scheduled hour.~~

~~(ll) —~~

~~(mm) —~~

~~(nn) — Outside the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:~~

~~(oo) —~~

~~(pp) —~~

~~(qq) — PGE shall pay the Transmission Customer at a rate equal to 90% of the absolute value of PGE's hourly EIC at the time of each under-scheduled hour.~~

~~(rr) — The Transmission Customer shall pay PGE at a rate equal to 110% of the absolute value of PGE's hourly EIC at the time of each over-scheduled hour.~~

(ss) — ~~Crediting Mechanism. Excess charges and under payments for energy imbalance and generation imbalance service provided outside the +/- 5.0 percent deviation bands established in Schedules 4 and 10 and outside the +/- 7.5 percent deviation band in Schedule 4R of the Tariff shall be referred to as Penalty Charges. PGE will distribute revenue received from such Penalty Charges as follows:~~

~~(tt) — Revenue from Penalty Charges will be distributed based upon energy imbalance calculations for each hour of a month.~~

~~(uu) —~~

~~(vv) —~~

~~(ww) — An Offending Customer is one which has incurred Penalty Charges~~

~~(xx) —~~

~~(yy) —~~

~~(zz) —~~

~~(aaa) — A Non-offending Customer is one which has not incurred Penalty Charges during the same hour as the Offending Customer(s).~~

~~(bbb) —~~

~~(ccc) —~~

~~(ddd) — For each hour, in which there is one or more Offending Customer, the revenues from Penalty Charges will be allocated as follows:~~

~~(eee) —~~

~~(fff) —~~

~~(ggg) — The sum of the revenues from Penalty Charges incurred by the Offending Customers will be distributed among all of the Non-offending Customers according to the percentage of power delivered to the Non-offending Customer's load or from the Non-offending Customer's generation that hour.~~

~~(hhh)(c) — The hourly distributions of revenues from Penalty Charges will be credited to the Non-offending Customer.~~

## SCHEDULE 5

### Operating Reserve - Spinning Reserve Service

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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 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 Spinning Reserve Service obligation. The amount of and charges for Spinning Reserve Service are set forth below. 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 who desires to purchase Spinning Reserve Service from the Transmission Provider must purchase an amount of reserved capacity equal to the sum of: 1) 1.5 % of the Transmission Customer's Reserved Capacity for Point-to-Point Transmission Service used to serve load in the Transmission Provider's Control Area, or 1.5 % of the Transmission Customer's Network Load responsibility for Network Integration Transmission Service; plus 2) 1.5 % of the capacity of a generating resource (including designated Network Resources) identified as the "source" in the Transmission Customer's transmission schedule and located within or dynamically scheduled to Transmission Provider's Control Area. The billing determinants for this service shall be reduced by any portion of the purchase obligation that a Transmission Customer obtains from third parties or supplies itself. If the regional reliability

council or Regional Transmission Group modifies its operating reserve obligation percentages, the Transmission Provider will make a section 205 filing with the Commission to modify the Transmission Customer's purchase obligations accordingly.

The rate for long-term Spinning Reserve Service shall be up to \$6.695 per kW- month.

The rate for short-term weekly Spinning Reserve Service shall be up to \$1.545 per kW - week.

The rate for short-term on-peak Spinning Reserve Service shall be up to \$0.257 per kW - day.

The rate for short-term off-peak Spinning Reserve Service shall be up to \$0.221 per kW - day.

Hourly rates for Spinning Reserve Service shall be up to \$16.09/ MWh for on-peak service and up to \$9.17/ MWh for off-peak service.

The peak period for daily service shall be all hours Monday through Saturday, excluding WECC holidays. The peak period for hourly service shall be the sixteen hours from 6:00 a.m. to 10 p.m., Monday through Saturday, excluding WECC holidays.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the weekly rate specified above times the highest amount in kilowatts of Reserved Capacity in any day during such week. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the daily rate specified above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total



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demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the weekly rate specified above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.

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## 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 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 Supplemental Reserve Service obligation. The amount of and charges for Supplemental Reserve Service are set forth below. 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 who desires to purchase Supplemental Reserve Service from the Transmission Provider must purchase an amount of reserved capacity equal to the sum of: 1) 1.5 % of the Transmission Customer's Reserved Capacity for Point-to-Point Transmission Service used to serve load in the Transmission Provider's Control Area, or 1.5 % of the Transmission Customer's Network Load responsibility for Network Integration Transmission Service; plus 2) 1.5 % of the capacity of a Transmission Customer's generating resource (including designated Network Resources) identified as the "source" in the Transmission Customer's transmission schedule and located within or dynamically scheduled to Transmission

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Provider's Control Area. The billing determinants for this service shall be reduced by any portion of the purchase obligation that a Transmission Customer obtains from third parties or supplies itself. If the regional reliability council or Regional Transmission Group modifies its operating reserve obligation percentages, the Transmission Provider will make a section 205 filing with the Commission to modify the Transmission Customer's purchase obligations accordingly.

The rate for long-term Supplemental Reserve Service shall be up to \$6.695 per kW- month.

The rate for short-term weekly Supplemental Reserve Service shall be up to \$1.545 per kW - week.

The rate for short-term on-peak Supplemental Reserve Service shall be up to \$0.257 per kW-day.

The rate for short-term off-peak Supplemental Reserve Service shall be up to \$0.221 per kW-day.

Hourly rates for Supplemental Reserve Service shall be up to \$16.09/MWh for on-peak service and up to \$9.17/MWh for off-peak service.

The peak period for daily service shall be all hours Monday through Saturday, excluding WECC holidays. The peak period for hourly service shall be the sixteen hours from 6:00 a.m. to 10 p.m., Monday through Saturday, excluding WECC holidays.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the weekly rate specified above times the highest amount in kilowatts of Reserved Capacity in any day during such week. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the daily rate specified above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not

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exceed the weekly rate specified above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.

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

The Transmission Customer shall compensate the Transmission Provider each month for Reserved Capacity at rates “up to” the sum of the applicable charges set forth below:

- 1) **Yearly delivery:** \_\_\_\_\_ one-twelfth of the demand charge of \$6.28/kW of  
\_\_\_\_\_ Reserved Capacity per year.
- 2) **Monthly delivery:** \$0.523/kW of Reserved Capacity per month.
- 3) **Weekly delivery:** \$0.121/kW of Reserved Capacity per week.
- 4) **Daily delivery:** \$0.020/kW of Reserved Capacity per day On- peak.

5) **Daily delivery:** \_\_\_\_\_ \$0.017/kW of  
Reserved Capacity per day Off-peak.

The peak period shall be all hours Monday through Saturday, excluding WECC holidays.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.

~~5)~~ **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-initiate requests for discounts (including requests for use by one’s wholesale merchant or an Affiliate’s

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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.

~~6)7)~~ **Resales:** The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by section 23.1 of the Tariff.

~~7)8)~~ **Taxes:** PGE may add to the above amount an amount in dollars sufficient to reimburse PGE for any amounts paid or payable by them as sales, excise or similar taxes (other than taxes based upon or measured by net income) in respect of the total amount payable to PGE pursuant to this Tariff, if necessary to allow PGE, after provision for such taxes, to realize the net amount payable to them under this Tariff. The amount of these taxes shall be detailed in the Service Agreement which shall be filed with the Commission. If the taxes or tax rates change, then PGE shall have the right to revise the Service Agreement and file it with the Commission.

~~8)9)~~ **Capacity Designations:** Capacity designations at the Point(s) of Receipt will be inclusive of transmission losses.

## SCHEDULE 8

### Non-Firm Point-To-Point Transmission Service

The Transmission Customer shall compensate the Transmission Provider for Non-Firm Point-To-Point Transmission Service up to the sum of the applicable charges set forth below:

- 1) **Monthly delivery:** \$0.523/kW of Reserved Capacity per month.
- 2) **Weekly delivery:** \$0.121/kW of Reserved Capacity per week.
- 3) **Daily delivery:** \$0.020/kW of Reserved Capacity per day On-peak.
- 4) **Daily delivery:** \$0.017/kW of Reserved Capacity per day Off-peak.

The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate specified in section (2) above times the highest amount in kilowatts of Reserved Capacity in any day during such week.

The peak period for daily service shall be all hours Monday through Saturday, excluding WECC holidays. The peak period for hourly service shall be the sixteen hours from 6:00 a.m. to 10 p.m., Monday through Saturday, excluding WECC holidays.

5) **Hourly delivery:** The basic charge shall be that agreed upon by the Parties at the time this service is reserved and in no event shall exceed \$1.257/MWh On-Peak, and \$0.718/MWh Off-peak.. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section (3) above times the highest

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amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the rate specified in section (2) above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.

6) **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.

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

8) **Taxes:** There shall be added to the above amount an amount in dollars sufficient to reimburse PGE for any amounts paid or payable by them as sales, excise or similar taxes (other than taxes based upon or measured by net income) in respect of the total amount payable to PGE pursuant to this Tariff, if necessary to allow PGE, after provision for such taxes, to



realize the net amount payable to them under this Tariff. The amount of these taxes shall be detailed in the Service Agreement which shall be filed with the Commission. If the taxes or tax rates change, then PGE shall have the right to revise the Service Agreement and file it with the Commission.

9) **Interruption or Curtailment:** A Transmission Customer reserving Short-term Non-firm Transmission Service shall not be relieved from paying PGE the agreed upon price unless such Non-firm service is interrupted or curtailed by PGE. In the event service is interrupted or curtailed, PGE shall reduce the charge to the Transmission Customer the following amounts per MW for each hour in which the use of the Reserved Capacity is interrupted or curtailed by PGE.

For monthly deliveries:      The monthly charge / MW  $\div$  346

For weekly deliveries:      The weekly charge / MW  $\div$  80

For daily deliveries:      The daily charge / MW  $\div$  16

Such reductions shall be made for up to 16 hours of interruptions or curtailments per day, 80 hours of interruptions or curtailments per week, and up to 346 hours of interruptions or curtailments per month.

10) **Capacity Designations:** Capacity designations at the Point(s) of Receipt will be inclusive of transmission losses.

**SCHEDULE 9**

**High Voltage Direct Assignment Facilities**

This Schedule is established to provide Point-to-Point and Network Transmission Customers the opportunity to use Transmission Capacity over the Colstrip Plant Transmission lines to the extent the capacity is available pursuant to the provisions of this tariff. The rates listed are provided as “up-to” or “ceiling” rates. For Point-to-Point transmission service, the charges listed in 9 (a) will be in addition to those charges listed in Schedules 7 and 8 (as applicable). The peak period for daily service shall be all hours Monday through Saturday, excluding WECC holidays. The peak period for hourly service shall be the sixteen hours from 6:00 a.m. to 10 p.m., Monday through Saturday, excluding WECC holidays. Capacity designations at the Point(s) of Receipt will be inclusive of transmission losses.

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(a) Colstrip Transmission Line Point-to-Point Service

**(Ceiling Rates)**

Total Annual Cost	\$6,056,563
Rated Capacity of Line (kW)	307,000
Demand Charge per kW - year	\$19.73
Demand Charge per kW- month	\$1.644
Demand Charge per kW-week	\$0.379
Daily Peak Charge per kW	\$0.063
Daily Off-peak Charge per kW	\$0.054
Hourly Peak Charge per MWh	\$3.952
Hourly Off-Peak Charge per MWh	\$2.258

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The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the weekly rate specified in 9 (a) above times the highest amount in kilowatts of Reserved Capacity in any day during such week. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the daily rate specified in 9 (a) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the weekly rate specified 9 (a) above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.

## SCHEDULE 10

### Generator Imbalance Service

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(a) Generator Imbalance Service is provided when a difference occurs between the output of a generator, that is not a PGE EIM Participating Resource, located in the Transmission Provider's Control Area and the resource component of the Transmission Customer Base Schedule-a delivery schedule from that generator to (1) another Control Area or (2) a load within the Transmission Provider's Control Area over a single hour. 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. 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 Transmission Provider may charge a Transmission Customer a penalty for either hourly generator imbalances under this Schedule or a penalty for hourly energy imbalances under Schedule 4 for imbalances occurring during the same hour, but not both unless the imbalances aggravate rather than offset each other.~~

(b) ~~Generator imbalances will be subject to charges as specified below. The amount of generator imbalance shall be calculated separately for each hour and settlements will occur on a cash basis for each hour's imbalances. Hourly imbalance charges between the Transmission Provider and the Transmission Customer will be net billed for the billing period.~~

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~~(c) An Energy Imbalance Cost (EIC) shall be determined for each hour. The EIC shall be calculated as follows:~~

- ~~1. The EIC will be equal to the market price of energy for each hour calculated pursuant to this Section (c)(1). The hourly EIC will be based upon the hourly Mid-Columbia Price Index published by Powerdex.~~

~~(d) The charges for Generation Imbalance Service are set forth below:~~

- ~~1. The Transmission Provider shall establish a deviation band of +/- 5.0 percent (with a minimum of 2 MW) of the scheduled transaction to be applied hourly to any energy imbalance that occurs as a result of the Transmission Customer's scheduled transaction(s). Within the deviation band, any deviation between hourly scheduled energy and actual generation of energy shall be repaid as a cash settlement as follows:~~

- ~~a. PGE shall pay the Transmission Customer at a rate equal to 100% of PGE's hourly EIC at the time of each over-generation.~~

- ~~b. The Transmission Customer shall pay PGE at a rate equal to 100% of PGE's hourly EIC at the time of each under-generation.~~

- ~~2. Outside the deviation band, any deviation between hourly scheduled energy and actual generation of energy shall be repaid as a cash settlement as follows:~~

- ~~a. PGE shall pay the Transmission Customer at a rate equal to 90% of PGE's hourly EIC at the time of each over-generation.~~

~~b. The Transmission Customer shall pay PGE at a rate equal to 110% of PGE's hourly EIC at the time of each under-generation.~~

~~3. For any deviation between hourly scheduled energy and actual generation of energy exceeding +/- 25%, Transmission Customer will pay an adder of 25% of EIC as a cash settlement on under-generation or have its payment reduced by 25% of EIC for over-generation, except that an intermittent resource will be exempt from this deviation band and will pay the deviation band charges for all deviations greater than the larger of 1.5 percent of 2 MW. An intermittent resource, for the limited purpose of this Schedule is an electric generator that is not dispatchable and cannot store its fuel source and therefore cannot respond to transmission security constraints.~~

~~(e) Crediting Mechanism. Excess charges and under payments for energy imbalance and generation imbalance service provided outside the +/- 5.0 percent deviation bands established in Schedules 4 and 10 and outside the +/- 7.5 percent deviation band in Schedule 4R of the Tariff shall be referred to as Penalty Charges. PGE will distribute revenue received from such Penalty Charges as follows:~~

- ~~1) Revenue from Penalty Charges will be distributed based upon energy imbalance calculations for each hour of a month.~~
- ~~2) An Offending Customer is one which has incurred Penalty Charges~~
- ~~3) A Non-offending Customer is one which has not incurred Penalty Charges during the same hour as the Offending Customer(s).~~

~~4) For each hour, in which there is one or more Offending Customer, the revenues from Penalty Charges will be allocated as follows:~~

~~a. The sum of the revenues from Penalty Charges incurred by the Offending Customers will be distributed among all of the Non-offending Customers according to the percentage of power delivered to the Non-offending Customer's load or from the Non-offending Customer's generation that hour.~~

~~b. The hourly distributions of revenues from Penalty Charges will be credited to the Non-offending Customer.~~

~~(f) Notwithstanding the foregoing, deviations from scheduled transactions in order to respond to directives by the Transmission Provider, a Balancing Authority, or a Reliability Coordinator shall not be subject to the deviation bands identified above and, instead, shall be settled financially, at the end of the month, at 100 percent of incremental and decremental cost. Such directives may include instructions to correct frequency decay, respond to a reserve sharing event, or change output to relieve congestion. The Transmission Provider shall establish charges for Generator Imbalance Service as follows (the following provisions do not apply to Transmission Customers which have received a Manual Dispatch or EIM Available Balancing Capacity dispatch, or which have communicated physical changes in the output of resources to the MO):~~

~~(1) A Transmission Customer shall be charged or paid for Generator Imbalance Service measured as the deviation of the Transmission Customer's metered generation compared to the resource component of the Transmission Customer Base Schedule settled as UIE for the period of the deviation at the applicable~~

PNode RTD price where the generator is located, as determined by the MO under Section 29.11(b)(3)(B) of the MO Tariff.

The following provisions shall apply to Transmission Customers which have received a Manual Dispatch or EIM Available Balancing Capacity dispatch, or which have communicated physical changes in the output of resources to the MO:

(1) (a) A Transmission Customer shall be charged or paid for Generator Imbalance Service measured as the deviation of the Transmission Customer's metered generation compared to the Manual Dispatch amount, the EIM Available Balancing Capacity dispatch amount, or physical changes in the output of resources incorporated by the MO in the FMM, settled as UIE for the period of the deviation at the applicable PNode RTD price where the generator is located, as determined by the MO under Section 29.11(b)(3)(B) of the MO Tariff; or

(b) A Transmission Customer shall be charged or paid for Generator Imbalance Service measured as the deviation of the Transmission Customer's metered generation compared to the Manual Dispatch amount, the EIM Available Balancing Capacity dispatch amount, or physical changes in the output of resources incorporated by the MO in RTD, settled as UIE for the period of the deviation at the applicable PNode RTD price where the generator is located, as determined by the MO under Section 29.11(b)(3)(B) of the MO Tariff.

(2) (a) A Transmission Customer shall be charged or paid for Generator Imbalance Service measured as the deviation of either the Manual Dispatch amount, the EIM Available Balancing Capacity dispatch amount, or physical changes in the output of resources incorporated by the MO in the FMM, compared to the resource



component of the Transmission Customer Base Schedule, settled as IIE for the period of the deviation at the applicable PNode FMM price where the generator is located, as determined by the MO under Section 29.11(b)(1)(A)(ii) of the MO Tariff; or

(b) Generator Imbalance Service measured as the deviation of either the Manual Dispatch amount, the EIM Available Balancing Capacity dispatch amount, or physical changes in the output of resources incorporated by the MO in RTD, compared to the FMM schedule, as IIE for the period of the deviation at the applicable PNode RTD price where the generator is located, as determined by the MO under Section 29.11(b)(2)(A)(ii) of the MO Tariff.

Applicability to Interconnection Customers:

To the extent the Interconnection Customer is a different entity than the Transmission Customer and controls the output of a generator located in the Transmission Provider's Control Area, the Interconnection Customer may be subject to charges for Generator Imbalance Service (rather than the Transmission Customer) in accordance with this Schedule 10.

## **SCHEDULE 11**

### **Real Power Losses**

The Transmission Customer taking Network Integration Transmission Service, Firm Point-to-Point, or Non-Firm Point-to-Point Transmission Service, excluding Energy Imbalance Service and Generator Imbalance Service, shall reimburse the Transmission Provider for Real Power Losses as provided in Sections 15.7 and 28.5 of this Tariff. The Transmission Customer must financially settle for Real Power Losses by reimbursement as specified herein.

Settlement of Real Power Losses associated with Energy Imbalance Service shall be pursuant to Schedule 4 or 4R of this Tariff, and settlement of Real Power Losses associated with Generator Imbalance Service shall be pursuant to Schedule 10 of this Tariff. The procedures to determine the amount of Real Power Losses associated with a Transmission Customer's Base Schedule, as well as the reimbursement for Real Power Losses, are set forth below.

The Transmission Customer shall compensate the Transmission Provider at a rate equal to the amount of Real Power Losses assessed to such Transmission Customer in a given hour multiplied by the hourly LAP price for the PGE BAA in that hour as established by the MO under section 29.11 (b)(3)(C) of the MO Tariff. A spreadsheet showing the LAP prices for each hour of the previous month shall be accessible through the MO's OASIS.

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**ATTACHMENT A**

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**Page 1 of 4**

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

- 1.0 This Service Agreement, dated as of \_\_\_\_\_, is entered into, by and between \_\_\_\_\_ ("Transmission Provider"), and \_\_\_\_\_ ("Transmission Customer").
- 2.0 The Transmission Customer has been determined by the Transmission Provider to have a Completed Application for Firm Point-To-Point Transmission Service under the Tariff.
- 3.0 The Transmission Customer has provided to the Transmission Provider an Application deposit in accordance with the provisions of Section 17.3 of the Tariff.
- 4.0 Service under this agreement shall commence on the later of (1) \_\_\_\_\_, or (2) the date on which construction of any Direct Assignment Facilities and/or Network Upgrades are completed, or (3) such other date as it is permitted to become effective by the Commission. Service under this agreement shall terminate on \_\_\_\_\_.
- 5.0 The Transmission Provider agrees to provide and the Transmission Customer agrees to take and pay for Firm Point-To-Point Transmission Service in accordance with the provisions of Part II of the Tariff and this Service Agreement.
- 6.0 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 below.

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Transmission Provider:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Transmission Customer:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7.0 The Tariff is incorporated herein and made a part hereof.

IN WITNESS WHEREOF, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

Transmission Provider:

By: \_\_\_\_\_  
Name Title Date

Transmission Customer:

By: \_\_\_\_\_  
Name Title Date

**Specifications For Long-Term Firm Point-To-Point Transmission Service**

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1.0 Term of Transaction: \_\_\_\_\_

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

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

2.0 Description of capacity and energy to be transmitted by Transmission Provider including the electric Control Area in which the transaction originates.

\_\_\_\_\_

3.0 Point(s) of Receipt: \_\_\_\_\_

Delivering Party: \_\_\_\_\_

4.0 Point(s) of Delivery: \_\_\_\_\_

Receiving Party: \_\_\_\_\_

5.0 Maximum amount of capacity and energy to be transmitted (Reserved Capacity):

\_\_\_\_\_

6.0 Designation of party(ies) subject to reciprocal service obligation: \_\_\_\_\_

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7.0 Name(s) of any Intervening Systems providing transmission service:

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

8.1 Transmission Charge:

8.2 System Impact and/or Facilities Study Charge(s):

8.3 Direct Assignment Facilities or Other Schedule 7 Charges:

8.4 Ancillary Services Charges:

**ATTACHMENT A-1**

**Form Of Service Agreement For  
The Resale, Reassignment Or Transfer Of  
Point-To-Point Transmission Service**

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- 1.0 This Service Agreement, dated as of \_\_\_\_\_, is entered into, by and between \_\_\_\_\_ (the Transmission Provider), and \_\_\_\_\_ (the Assignee).
- 2.0 The Assignee has been determined by the Transmission Provider to be an Eligible Customer under the Tariff pursuant to which the transmission service rights to be transferred were originally obtained.
- 3.0 The terms and conditions for the transaction entered into under this Service Agreement shall be subject to the terms and conditions of Part II of the Transmission Provider's Tariff, except for those terms and conditions negotiated by the Reseller of the reassigned transmission capacity (pursuant to Section 23.1 of this Tariff) and the Assignee, to include: contract effective and termination dates, the amount of reassigned capacity or energy, point(s) of receipt and delivery. Changes by the Assignee to the Reseller's Points of Receipt and Points of Delivery will be subject to the provisions of Section 23.2 of this Tariff.
- 4.0 The Transmission Provider shall credit the Reseller for the price reflected in the Assignee's Service Agreement or the associated OASIS schedule, except in the case of transfers, in which case the financial obligations inherent in the original Transmission Service Reservation are transferred to the Assignee.
- 5.0 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 below.
- 6.0 This Agreement shall be made effective upon execution and shall continue in effect until terminated. Either party to this Agreement may terminate the Agreement by giving the other party thirty (30) calendar days' written notice, except that neither party can terminate the Agreement at a time when the Assignee has an active Point-To-Point Transmission Service reservation pursuant to this Service Agreement. If either party provides written notice of termination to the other party prior to the Termination Date set forth in Section 1.0 of the "Specifications For The Resale, Reassignment Or Transfer of Long-Term Firm Point-To-Point Transmission Service" (Specifications) associated with this Agreement, such termination of this Agreement shall become effective on the later of: (1) thirty (30) calendar days following the date of the written notice, or (2) the calendar day following the Termination Date in Section 1.0 of the Specifications.

Transmission Provider:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Assignee:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6.0 The Tariff is incorporated herein and made a part hereof.

IN WITNESS WHEREOF, the parties have caused this Service Agreement to be executed  
by their respective authorized officials.

Transmission Provider:

By: \_\_\_\_\_  
Name Title Date

Assignee:

By: \_\_\_\_\_  
Name Title Date



**Specifications For The Resale, Reassignment Or Transfer of Long-Term Firm Point-To-Point Transmission Service**

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1.0 Term of Transaction: \_\_\_\_\_

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

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

2.0 Description of capacity and energy to be transmitted by Transmission Provider including the electric Control Area in which the transaction originates.

\_\_\_\_\_

3.0 Point(s) of Receipt: \_\_\_\_\_

Delivering Party: \_\_\_\_\_

4.0 Point(s) of Delivery: \_\_\_\_\_

Receiving Party: \_\_\_\_\_

5.0 Maximum amount of reassigned capacity: \_\_\_\_\_

6.0 Designation of party(ies) subject to reciprocal service obligation: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

7.0 Name(s) of any Intervening Systems providing transmission service: \_\_\_\_\_

\_\_\_\_\_

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

8.1 Transmission Charge: \_\_\_\_\_

\_\_\_\_\_

8.2 System Impact and/or Facilities Study Charge(s):

\_\_\_\_\_

\_\_\_\_\_

8.3 Direct Assignment Facilities Charge: \_\_\_\_\_  
\_\_\_\_\_

8.4 Ancillary Services Charges: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9.0 Name of Reseller of the reassigned transmission capacity:  
\_\_\_\_\_

**ATTACHMENT B**  
**Form of Service Agreement For**  
**Short Term Firm Point-to-Point Transmission Service and**  
**Non-Firm Point-To-Point Transmission Service**

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This SHORT-TERM FIRM POINT-TO-POINT TRANSMISSION SERVICE and NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE AGREEMENT made and entered into this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, ("Effective Date") by and between Portland General Electric Co. ("Transmission Provider") and \_\_\_\_\_ ("Transmission Customer"), which hereinafter may be referred to individually as "Party" or collectively as "Parties".

W I T N E S S E T H

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WHEREAS, the Transmission Provider provides Short-Term Firm Point-to-Point Transmission Service and Non-Firm Point-to-Point Transmission Service over its Transmission System under Transmission Provider's Open Access Transmission Tariff; and

WHEREAS, the Transmission Customer desires to obtain Short-Term Firm Point-to-Point Transmission Service and Non-Firm Point-to-Point Transmission Service over Transmission Provider's Transmission System from time to time.

NOW THEREFORE, the Parties agree as follows:

Section 1 – Definitions

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Unless otherwise defined herein, all capitalized terms shall have their respective meanings as set forth in Transmission Provider's Open Access Transmission Tariff, FERC Electric Tariff Volume No. 8 ("Tariff"). [Transmission Customer] shall be the Transmission Customer as such term is used in the Tariff and PGE shall be the Transmission Provider as such term is used in the Tariff.

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Section 2 - Standard Provisions

- 2.1 Terms and Conditions: The terms and conditions under which short-term firm and non-firm Transmission Service is offered and accepted are pursuant to this Service Agreement and to the Tariff. The Tariff is hereby incorporated by this reference and made a part of this Service Agreement as Exhibit 1. Transmission Provider may change the terms and conditions of the Tariff upon, and only upon, approval by the Commission pursuant to a filing by Transmission Provider.
- 2.2 This Service Agreement shall be made effective upon execution and shall continue in effect until terminated. Either Party to this Service Agreement may terminate the Service Agreement by giving the other Party thirty (30) calendar days' advance written notice, except that neither Party can terminate this Service Agreement at a time when the Transmission Customer has an active Short Term Firm Point-to-Point or Non-Firm Point-to-Point Transmission Service reservation pursuant to this Service Agreement. If either Party provides written notice of termination to the other Party at a time when the Transmission Customer has an active reservation under this Service Agreement, termination of this Agreement shall become effective on the later of: (1) thirty (30) calendar days following the date of the written notice, or (2) the calendar day following the end of the active reservation. Transmission Customer shall not submit any new reservation under this Service Agreement after the time that it has submitted notice of termination to the Transmission Provider.
- 2.3 Eligible Customer: Transmission Customer represents that it is an Eligible Customer under the Tariff.

Section 3 - Point-to-Point Transmission Service

- 3.1 The Transmission Provider shall provide Short-Term Firm Point-to-Point Transmission Service and Non-Firm Point-to-Point Transmission Service upon request by an authorized representative of the Transmission Customer.
- 3.2 The Transmission Customer agrees to supply information which the Transmission Provider deems reasonably necessary in accordance with Good Utility Practice in order for it to provide the requested service.
- 3.3 The Transmission Provider shall provide, and the Transmission Customer shall take and pay for, Short-Term Firm Point-to-Point Transmission Service and Non-Firm Point-to-Point Transmission Service pursuant to the provisions of Part II of the Tariff and this Service Agreement.

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3.4 The applicable charges for Short-Term Firm Point-to-Point Transmission Service shall be pursuant to Schedule 7 of the Tariff and shall be agreed upon by the Parties at the time such service is reserved.

3.5 The applicable charges for Non-Firm Point-to-Point Transmission Service shall be pursuant to Schedule 8 of the Tariff and shall be agreed upon by the Parties at the time such service is reserved.

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Section 4 - Billing and Payment

Billing and payment for all services provided under this Service Agreement shall be pursuant to Section 7 of the Tariff. Bills sent to the Transmission Customer shall be sent to:

Attention:

◇  
◇  
◇

All payments to the Transmission Provider shall be wire transferred to:

◇  
ABA # \_\_\_\_\_ for credit to  
Portland General Electric Co General Fund  
Account No. \_\_\_\_\_

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Section 5 - Miscellaneous Provisions

- 5.1 Waivers: Any waiver at any time by either Party hereto of its rights with respect to the other Party or with respect to any matter arising in connection with this Service Agreement shall not be considered a waiver with respect to any other default of the same or any other matter.
- 5.2 Effect of Section Headings: Section headings appearing in this Service Agreement are inserted for convenience of reference only and shall not be construed to be interpretations of the text of this Service Agreement.
- 5.3 Notices: Any written notice or request made to the Transmission Provider under this Service Agreement shall be directed to:  
Attention: Director, Transmission & Reliability Services  
Portland General Electric Company  
121 SW Salmon St., 3WTC0402  
Portland, Oregon 97204

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Any written notice or request made to the Transmission Customer under this Service Agreement shall be directed to:

Attention: <>  
<>  
<>  
<>

IN WITNESS WHEREOF, the Parties hereto have caused this Service Agreement to be executed in their respective names by their duly authorized representatives as of the date first noted above.

Portland General Electric Co.

By: \_\_\_\_\_  
\_\_\_\_\_  
*print/type*

\_\_\_\_\_  
*Title*

Signed this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

<TRANSMISSION CUSTOMER>

By: \_\_\_\_\_  
\_\_\_\_\_  
*print/type*

\_\_\_\_\_  
*Title*

Signed this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

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## ATTACHMENT C

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### Methodology to Assess Available Transmission Capability

This Attachment C contains the Transmission Provider's methodology for determining Available Transfer Capability.

#### 1. Definitions

**1.1. Available Transfer Capability (ATC)** - The measure of the transfer capability remaining in the physical transmission network for the further commercial activity over and above already committed uses. It is defined as the Total Transfer Capability less the Existing Transmission Commitments (including retail service), less a Capacity Benefit Margin, less a Transmission Reliability Margin, plus Postbacks, plus counterflows.

**1.2. Capacity Benefit Margin (CBM)** - As defined in Section 4.4.1 of this Attachment C.

**1.3. Counterflows** – As defined in Section 4.6.1 of this Attachment C.

**1.4. Existing Transmission Commitments (ETC)** - As defined in Section 4.2.1 of this Attachment C.

**1.5. Firm Existing Transmission Commitments (ETC<sub>F</sub>)** – As defined in Section 4.2.2.1 of this Attachment C.

**1.6. Non-Firm Existing Transmission Commitments (ETC<sub>NF</sub>)** – As defined in Section 4.2.2.2 of this Attachment C.



**1.7. Operating Horizon** - The period of time that begins at end of the Scheduling Horizon and extends through the end of the last day that has been or is being prescheduled.

**1.8. Planning Horizon** - The period of time that begins at the end of the Operating Horizon and extends through the end of the posting period, as required by applicable regulations.

**1.9. Postbacks** – As defined in Section 4.5.1 of this Attachment C.

**1.10. Scheduling Horizon** - The period of time that begins with the current hour and extends out ten hours.

**1.11. Total Transfer Capability (TTC)** - As defined in Section 4.1.1 of this Attachment C.

**1.12. Transmission Reliability Margin (TRM)** -As defined in Section 4.3.1 of this Attachment C.

**1.13. Transmission Service Provider** – The entity that administers the transmission Tariff and provides Transmission Service to Transmission Customers under applicable transmission Service Agreements.

**1.14. Transmission Service Request (TSR)** – a request for transmission service submitted pursuant to Transmission Provider’s Open Access Transmission Tariff.

## 2. Description of Mathematical Algorithm Used to Calculate Firm And Non-Firm ATC

The Transmission Provider uses the Rated System Path Methodology in the assessment of firm and non-firm ATC for all posted paths in the Planning, Operating and Scheduling Horizons. This ATC methodology is as prescribed in NERC Standard MOD-029-1, Rated System Path Methodology. The process of calculating ATC is performed in a third party software product that utilizes variable parameter settings and calculation adjustments to establish formulas for the various firm and non-firm ATCs consistent with the mathematical algorithms used by the Transmission Provider.

The mathematical algorithms for firm and non-firm ATC in the Scheduling, Operating and Planning Horizons consist of the following general formulas:

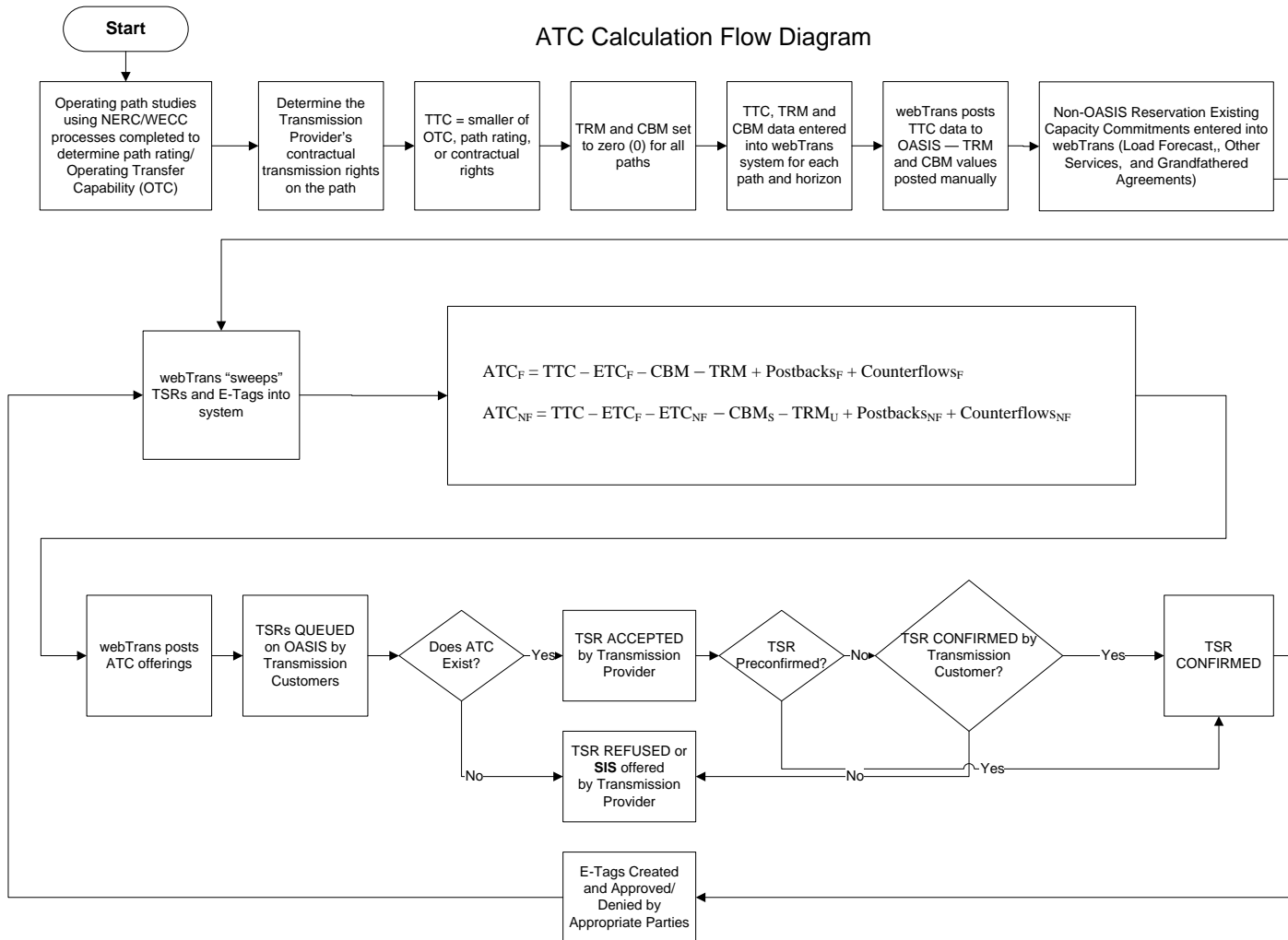
$$ATC_F = TTC - ETC_F - CBM - TRM + Postbacks_F + Counterflows_F$$

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

The components of these general formulas are described in further detail in this Attachment C. The specific mathematical algorithms are posted on the Transmission Provider's OASIS website at:

[http://www.oasis.oati.com/PGE/PGEdocs/ATC\\_Algorithms.pdf](http://www.oasis.oati.com/PGE/PGEdocs/ATC_Algorithms.pdf)

### 3. Process Flow Diagram Illustrating Various Steps Through Which ATC is Calculated



4. **Detailed Description of How Each ATC Component is Calculated for the Operating and Planning Horizons**

**4.1 Total Transfer Capability (TTC)**

**4.1.1 Definition**

The amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission systems by way of all transmission lines (paths) between those areas under specified system conditions.

**4.1.2 Calculation Methodology**

When performing the technical studies to determine the TTC for those Posted Paths in which the Transmission Provider is also the Transmission Operator, the Transmission Provider will follow MOD-029-1a — Rated System Path Methodology.

(a) Power system simulation software is used to model the transmission system, adjust the generation and load levels to determine the TTC (either a maximum flow or reliability limit) that can be simulated on each Posted Path while satisfying all NERC /WECC Planning Criteria.

(b) Where it is not possible to actually simulate a reliability-limited flow on a Posted Path in a direction counter to prevailing flow, the TTC for the non-prevailing direction will be set equal to the TTC in the prevailing direction, without the use of a Special Protection Scheme.

(c) TTC will be determined either prior to a new transmission element being brought into service or when a modification to a transmission element would affect the TTC.

(d) Once the TTC determination is made, it remains fixed and changes only if there is a physical or operational change to the transmission system or a transmission component which requires a change to TTC.

(e) When either transmission facilities are jointly owned, or capacity on the Posted Path is limited by contract, the TTC will be set at the lesser of the maximum allowable limit based upon the capacity allocated by contract or the reliability limit.

Additional information regarding determination of TTC for special conditions for specific paths may be posted and updated from time to time on the Transmission Service Provider's OASIS.

#### **4.1.3 Databases Used in TTC Assessments**

The Transmission Provider uses the transmission system model database from the up to date system base cases that are developed annually by WECC for its member use in planning and operating studies. WECC base cases include:

- All contiguous transmission systems within the WECC regional interconnection.
- Initial condition models of system elements are modeled as in or out of service as consistent for the time period and conditions being studied.

- All generation and control system parameters (either a single generator or multiple generators) greater than 20 MVA at the point of interconnection are represented.
- Load is allocated to appropriate buses based on load forecasts developed by the Balancing Authorities for time period and conditions being studied.
- Transmission and Generation Facility additions and retirements are represented consistent with the time period represented. Series compensation is modeled at the expected operating level.
- Facility Ratings are modeled as provided by the transmission and generator owners for the time period being studied.
- Phase shifters are modeled with automatic controls enabled.
- Special Protection Systems and/or Remedial Action Schemes are modeled, as appropriate, if they are currently in place or are projected to be implemented within the studied time horizon.

#### **4.1.4 Assumptions Used in TTC Assessments**

When performing technical studies to determine the TTC for those Posted Paths in which the Transmission Provider is also the Transmission Operator, the Transmission Provider will utilize data and assumptions consistent with the requirements of NERC Reliability Standard MOD-029-1a.

The assumptions used in the studies are further described as follows:

##### **4.1.4.1 Load Levels**

TTC is based upon initial system conditions where all transmission elements are modeled as in or out of service consistent for the time period being studied. System conditions affecting TTC, including load levels typical for the posting period (e.g., heavy summer period), determine the starting point for study conditions.

#### **4.1.4.2 Generation Dispatch**

Generation resources internal and external to the Transmission Provider's service territory are adjusted (within their capabilities) to provide a maximum TTC.

#### **4.1.4.3 Modeling of Planned and Contingency Outages**

Values for TTC on all Posted paths are the same for both the Planning and Operating Horizons.

- Power transfers into the service territory are increased until a maximum transfer limit is reached or until a critical contingency with a limiting element is identified that limits the TTC. Contingencies for screening are defined as Category B and C contingencies in NERC/WECC Reliability Criteria. System performance for outages must meet the NERC/WECC Reliability Criteria.
- Planned outages are screened using contingencies defined as Category B and C contingencies in the NERC/WECC Reliability Criteria. System

performance for outages must meet the requirements as outlined in the NERC/WECC Reliability Criteria. Any significant reductions in Posted path capability from the system normal TTC are posted on OASIS as necessary.

## **4.2 Existing Transmission Commitments (ETC)**

### **4.2.1 Definition**

Existing Transmission Commitments (ETC) – Committed uses of a Transmission Service Provider’s Transmission System considered when determining ATC

### **4.2.2 Determination Methodology**

Existing Transmission Commitments (ETCs) are divided into two categories dependent upon whether the use is defined as being either for a firm or non-firm transmission use and its subsequent impact on the calculation of firm or non-firm ATC.

### **4.2.3 Firm Existing Transmission Commitments (ETC<sub>F</sub>)**

The following algorithm will be used when calculating ETC<sub>F</sub> for all time horizons:

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

Where:

- NL<sub>F</sub> is the firm capacity set aside to serve peak Native Load commitments for the time period being calculated, to include losses and Native Load growth, not otherwise included in TRM or CBM. Native Load growth is determined from the PGE Short Term Forecast Model. Load values from



the 1 in 5 Winter Season Peak of the model are used in the Planning Horizon ATC calculation for those years beyond the current year and the next year.

- $NITS_F$  is the firm capacity reserved for the Network Integration Transmission Service serving load, to include losses and load growth, not otherwise included in TRM or CBM.
- $GF_F$  is the firm capacity set aside for the grandfathered firm transmission service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff.
- $PTP_F$  is the firm capacity reserved for confirmed Point-To-Point Transmission Service
- $ROR_F$  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.

$OS_F$  is the firm capacity reserved for any other service(s), contract(s) or agreements not specified above using Firm Transmission Service as specified in the Available Transfer Capability Implementation Document (ATCID) posted on the Transmission Provider's OASIS website at:

[http://www.oasis.oati.com/PGE/PGEdocs/PGE\\_ATCID.pdf](http://www.oasis.oati.com/PGE/PGEdocs/PGE_ATCID.pdf)

#### **4.2.4 Non-Firm Existing Transmission Commitments ( $ETC_{NF}$ )**

The following algorithm will be used when calculating  $ETC_{NF}$  for all time horizons:

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

Where:

- $NITS_{NF}$  is the non-firm capacity reserved for Network Integration Transmission Service (i.e. secondary service), to include losses and load growth not otherwise included in TRM and CBM.
- $GF_{NF}$  is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff. Transmission Service Provider has no non-firm grandfathered Transmission Service contracts.
- $PTP_{NF}$  is the non-firm capacity reserved for confirmed Point-To-Point Transmission Service.
- $OS_{NF}$  – 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 posted on the Transmission Provider's OASIS website at: [http://www.oasis.oati.com/PGE/PGEdocs/PGE\\_ATCID.pdf](http://www.oasis.oati.com/PGE/PGEdocs/PGE_ATCID.pdf)

#### 4.3. Transmission Reliability Margin (TRM)

##### 4.3.1 Definition

That amount of transmission transfer capability necessary to provide a reasonable assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and the need for

operating flexibility to ensure reliable system operation as system conditions change.

#### **4.3.2 Calculation Methodology**

Methodologies used in the Northwest to calculate path TTC limits include a reliability component that has the same characteristics as TRM. Studies to determine path TTC limits are based on the NERC/WECC Planning and Operating Criteria for maintaining reliability. As such, for purposes of calculating Firm and Non-Firm ATC, TRM is set to zero for all posted paths.

#### **4.3.3 Databases Used in TRM Assessments**

The Transmission Provider does not use any databases in its TRM assessments.

### **4.4 Capacity Benefit Margin (CBM)**

#### **4.4.1 Definition**

Capacity Benefit Margin (CBM) is that amount of firm transmission transfer capability preserved by the transmission provider for Load-Serving Entities (LSEs), whose loads are located on that Transmission Service Provider's system, to enable access by the LSEs to generation from interconnected systems to meet generation reliability requirements. Preservation of CBM for an LSE allows that entity to reduce its installed generating capacity below that which may otherwise have been necessary without interconnections to meet its generation reliability requirements.

The transmission transfer capability preserved as CBM is intended to be used by the LSE only in times of emergency generation deficiencies,

#### **4.4.2 Practice**

The Transmission Provider does not set aside transfer capability for CBM in its ATC calculation methodology. CBM is set to zero (0) for ATC calculations in all timing horizons. Because the Transmission Provider does not set aside transfer capability for CBM in its ATC calculation methodology, it does not have any procedures related to a resource adequacy assessment. There is no current regional methodology for generation reliability assessments that sets aside transmission capacity for the use of CBM. Should the Transmission Provider determine that it is necessary to use an amount other than zero for CBM, the Transmission Provider will post the required information on its OASIS including any required reasons and or methodology used in determining CBM and location. This posting will be to its Capacity Benefit Margin Implementation Document (CBMID) located at:

[http://www.oasis.oati.com/PGE/PGEdocs/PGE\\_CBMID.pdf](http://www.oasis.oati.com/PGE/PGEdocs/PGE_CBMID.pdf)

#### **4.4.3 Databases Used in CBM Assessments**

Because the Transmission Provider does not set aside transfer capability for CBM in its ATC calculation methodology, no databases are currently used in assessing CBM.

#### **4.4.4. Calculation Methodology**

It is the transmission provider's practice to not set aside transfer capability as CBM and as such CBM is set to zero (0) for all posted paths. CBM will be reevaluated on at least a yearly basis to determine if continuation of the transmission provider's current practice should be continued or what, if any, changes may be warranted.

#### **4.4.5 No-Double Counting of Contingency Outages when Performing CBM, TTC, and TRM Calculations**

Because the Transmission Provider does not set aside transfer capability for CBM in its ATC calculation methodology and therefore sets CBM to zero (0) for all posted paths, there is no double counting of contingency outages when performing CBM calculations.

#### **4.4.6 Procedures for Use of CBM during Emergencies**

Because the Transmission Provider does not set aside transfer capability for CBM in its ATC calculation methodology, the Transmission Provider does not allow the use of CBM during emergencies.

### **4.5 Postbacks**

#### **4.5.1 Definition**

Postbacks are positive adjustments to ATC as defined in the Current Postback Methodology Document

#### **4.5.2 Practice**

Firm Postbacks (Postbacks<sub>F</sub>) will include the capacity values of Recalls, Redirects and Annulled Firm Reservations. Non-Firm Postbacks (Postbacks<sub>NF</sub>) will include all Firm Postbacks plus the unscheduled firm capacity of confirmed Transmission Service. The use of Postbacks will be described in detail in the Current Postback Methodology document posted on the Transmission Service Providers OASIS located at:

[http://www.oasis.oati.com/PGE/PGEdocs/PGE\\_Postback\\_Methodology.pdf](http://www.oasis.oati.com/PGE/PGEdocs/PGE_Postback_Methodology.pdf)

### **4.6 Counterflows**

#### **4.6.1 Definition**

Counterflows are the scheduled energy values of transactions utilizing either a Firm or Non-firm Transmission Service on the opposite path for which an ATC is being calculated, i.e. for the purposes of ATC counterflows are counter schedules.

#### **4.6.2 Practice**

Firm counter schedules will add capacity to the calculation of Non-Firm ATC in the Scheduling Horizon. The use of counter schedules will be described in detail in the Available Transfer Capability Implementation Document posted in the Transmission Service Provider's OASIS website located at:

[http://www.oasis.oati.com/PGE/PGEdocs/PGE\\_ATCID.pdf](http://www.oasis.oati.com/PGE/PGEdocs/PGE_ATCID.pdf)

## ATTACHMENT D

### Methodology for Completing a System Impact Study

Upon receipt of a request for service pursuant to the applicable terms and conditions of this Tariff, PGE will complete a System Impact Study associated with the requested transmission service. The study procedure will use Good Utility Practice and the engineering and operating principles, standards, guidelines, and criteria of PGE, the WECC, NERC, or any similar organization that may exist in the future of which PGE is then a member.

PGE shall use its sole discretion as to the scope, details and methods used to perform the Study. If necessary, a meeting between PGE and applicant shall be held as soon as practical after execution of the System Impact Study Agreement to: (a) review the application and any known issue that could affect the scope of the study; and (b) develop a scope of study. The location of the meeting shall be at PGE's offices unless the parties mutually agree to another location.

Factors to be considered in determining the capacity availability on PGE's Transmission system will include but not be limited to:

1. Steady state power flow study results;
2. Stability study results;
3. NERC/WECC and PGE system design criteria;
4. Transmission capacity of the existing system;
5. Transmission capacity of the system after the request is added;
6. Reliability requirements of applicant and PGE;
7. Type and terms of the service requested;
8. Capacity needed to meet current and 10-year forecasted load of Native Load Customers and Network Customers' loads; and
9. Capacity needed to meet contractual obligations that are expected before the requested Transmission Service begins.

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## ATTACHMENT E

### Index of Point-To-Point Transmission Service Customers

Refer to FERC Electric Quarterly Report online software for the most current list of Point-To-Point Transmission Service Customers.

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## ATTACHMENT F

### Service Agreement For Network Integration Transmission Service

- 1.0 This Service Agreement, dated as of \_\_\_\_\_, is entered into, by and between \_\_\_\_\_ (Transmission Provider) and \_\_\_\_\_ (Network Customer).
- 2.0 The Network Customer has been determined by the Transmission Provider to have a valid request for Network Integration Service under the Company's Network Integration Transmission Service Tariff (Tariff).
- 3.0 The Network Customer has provided to the Transmission Provider an application deposit in the amount of \$ \_\_\_\_\_, which will be applied to charges for service under this Agreement in accordance with the provisions of Section 29.2 of the Tariff.
- 4.0 Service under this Agreement shall commence on the later of: (1) \_\_\_\_\_, or (2) the date on which construction of any new facilities necessary to provide the service are completed, or (3) such other date as it is permitted to become effective by the Commission. Service under this agreement shall terminate on [Customer option of date certain or minimum 90 days notice].
- 5.0 The Transmission Provider agrees to provide and the Network Customer agrees to take and pay for Network Integration Service in accordance with the provisions of the Tariff and this Service Agreement.
- 6.0 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 below

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Transmission Provider:

Network Customer:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 7.0 The following documents are incorporated herein and made a part of this Agreement:  
(a) The Transmission Provider's Network Integration Transmission Service Tariff;  
(b) Appendix A, which is the Network Customer's application for network integration service (as required by Section 29.2 of this Tariff); and (c) Appendix B, which is the Network Operating Agreement entered into between the Network Customer and the Transmission Provider.
- 8.0 The Network Customer's Network Resources are [describe]\_\_\_\_\_.
- 9.0 The Network Customer's Network Loads are [describe]\_\_\_\_\_.
- 10.0 [If applicable] The Network Customer's Owned Transmission Facilities are \_\_\_\_\_.  
Compensation from the Transmission Provider to the Network Customer for the use of these facilities will be determined by the following:

\_\_\_\_\_  
\_\_\_\_\_ .



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14.0 Should Network Customer fail to respond to Load Shedding or Curtailment procedures as provided in the Tariff or Operating Agreement, Network Customer shall pay Transmission Provider one hundred (100.0) mills per kilowatt-hour for all energy used, that should have been Curtailed or shed. In addition, Network Customer shall 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 on trial and appeal and all other obligations of Transmission Provider or to third parties arising out of or resulting from the Network Customer's failure to Load Shed or Curtail.

15.0 Network Customer shall pay the following rates and charges:

Monthly Demand Charge: \_\_\_\_\_.

Redispatch Charge: \_\_\_\_\_.

Ancillary Charges: \_\_\_\_\_.

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**IN WITNESS WHEREOF**, the Parties have caused this Service Agreement to be executed by their respective authorized officials.

TRANSMISSION PROVIDER:

DATE:

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

\_\_\_\_\_

Network Customer:

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

\_\_\_\_\_  
(Title)

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## ATTACHMENT G

### Network Operating Agreement

The Network Operating Agreement may include but shall not be limited to provisions addressing the following:

1. Load Shedding;
2. Equipment to be Installed;
3. Transfer of Data; and
4. Other Technical and Operational Considerations for Implementation of Part III of this Tariff.

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**ATTACHMENT H**

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

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1. The Annual Transmission Revenue Requirement for purposes of the Network Integration Transmission Service and Retail Network Integration Transmission Service shall be \$20,050,384.
2. The amount in (1) shall be effective until amended by the Transmission Provider or modified by the Commission.
3. PGE may add to the above amount an amount in dollars sufficient to reimburse PGE for any amounts paid or payable by them as sales, excise or similar taxes (other than taxes based upon or measured by net income) in respect of the total amount payable to PGE pursuant to this Tariff, if necessary to allow PGE, after provision for such taxes, to realize the net amount payable to them under this Tariff. The amount of these taxes shall be detailed in the Service Agreement which shall be filed with the Commission. If the taxes or tax rates change, then PGE shall have the right to revise the Service Agreement and file it with the Commission.
4. All quantities used in calculating the Network Customer's Network load and Transmission Provider's Monthly Transmission System Peak shall be adjusted to the transmission system input level, i.e., shall include the transmission capacity amount associated with any applicable losses.

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**ATTACHMENT I**

**Index of Network Integration Transmission Service Customers**

Refer to FERC Electric Quarterly Report online software for the most current list of Network Integration Transmission Service Customers.

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**Attachment J**

**Procedures Addressing Parallel Flows**

\_\_\_\_\_The North American Electric Reliability Corporation’s (“NERC”)’s Qualified Path Unscheduled Flow Relief for the Western Electricity Coordinating Council (“WECC”), Reliability Standard WECC-IRO-STD-000-0 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.

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**ATTACHMENT K**  
**Transmission Planning Process**

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# ATTACHMENT K

## Transmission Planning Process

### Preamble

In accordance with the Commission's regulations, Transmission Provider's planning process is performed on a local, regional, interregional and interconnection-wide basis. Part A of this Attachment K addresses the local planning process. Part B of this Attachment K addresses the regional planning process. Part C of this Attachment K addresses interregional coordination with the planning regions in the United States portion of the Western Interconnection. Part D of this Attachment K addresses the interconnection-wide planning process.

### **1**     **DEFINITIONS**

Unless defined below,<sup>1</sup> capitalized terms shall refer to terms defined in the Tariff.

**1.1 Alternative Project** Alternative Project is defined in Section 18.3.2 and collectively refers to Sponsored Projects, projects submitted by stakeholders, projects submitted by Merchant Transmission Developers, and unsponsored projects identified by the Planning Committee (if any).

**1.2 Annual Capital-Related Costs** Annual Capital-Related Costs is defined in Section 18.4.2.

**1.3 Applicant** Applicant is defined in Section 18.2.2 as a Project Sponsor and a stakeholder that submits an unsponsored project.

**1.4 Beneficiary** Beneficiary means any entity, including but not limited to transmission providers (both incumbent and non-incumbent), Merchant Transmission Developers, load serving entities, transmission customers or generators that utilize the regional transmission system within the NTTG Footprint to transmit energy or provide other energy-related services.

**1.5 Biennial Study Plan** Biennial Study Plan means the study plan used to produce the Regional Transmission Plan, as approved by the Steering Committee. The Biennial Study Plan is described in Section 18.3.2.

---

<sup>1</sup> Please note that additional definitions with respect to interregional coordination and cost allocation are contained in Section C of this Attachment K, which contains provisions that are common among each of the planning regions in the United States portion of the Western Interconnection.

**1.6 Change Case** A Change Case is defined in Section 18.4.1 as a scenario where one or more of the Alternative Projects is added to or replaces one or more non-Committed projects in the IRTP. The deletion or deferral of a non-Committed Project in the IRTP without including an Alternative Project can also be a Change Case.

**1.7 Committed Project** A Committed Project is defined in Section 20.1 as a project that has all permits and rights of way required for construction, as identified in the submitted development schedule, by the end of Quarter 1 of the current Regional Planning Cycle.

### **1.8 Confidentiality Agreement**

Confidentiality Agreement means the agreement posted on Transmission Provider's OASIS at [http://www.oasis.oati.com/PGE/PGEdocs/CEII\\_Agreement\\_Form.docx](http://www.oasis.oati.com/PGE/PGEdocs/CEII_Agreement_Form.docx). The Confidentiality Agreement is used to provide confidential information as referenced in Sections 11.3 and 15.2.

**1.9 Costs Allocation Committee** Cost Allocation Committee is defined in Section 12.2.

**1.10 Cost Allocation Committee Charter** Cost Allocation Committee Charter means that document attached as Exhibit D to this Attachment K.

**1.11 Cost Allocation Data Form** Cost Allocation Data Form means the form posted on NTTG's website used to submit a project requesting cost allocation as referenced in Sections 18.2.3 and 18.5.2.

**1.12 Critical Energy Infrastructure Information ("CEII")** Critical Energy Infrastructure Information is defined by the Commission's regulations in 18 C.F.R. Part 388 (or any successor thereto) and associated orders issued by the Commission.

### **1.13 Data Submittal Form**

Data Submittal Form means the form posted on NTTG's website used to submit projects and project information for consideration and is used to submit updated project information as referenced in Section 18.2.1.

**1.14 Demand Resources** Demand Response means mechanisms to manage demand for power in response to supply conditions, for example, having electricity customers reduce their consumption at critical times or in response to market prices. For purposes of this Attachment K, this methodology is focused on curtailing demand to avoid the need to plan new sources of generation or transmission capacity.

**1.15 Draft Regional Transmission Plan** Draft Regional Transmission Plan refers to the version of the Regional Transmission Plan that is produced by the end of Quarter 4, as provided for in Section 18.4.5, and presented to stakeholders for comment in Quarter 5 as set forth in Section 18.5.

**1.16 Draft Final Regional Transmission Plan** Draft Final Regional Transmission Plan refers to the version of the Regional Transmission Plan that is produced by the end of Quarter 6, as provided for in Section 18.6.3, presented to stakeholders for comment in Quarter 7 as set forth in Section 18.7, and presented, with any necessary modifications, to the Steering Committee for adoption in Quarter 8 as set forth in Section 18.8.

**1.17 Economic Study or Economic Congestion Study** Economic Study or Economic Congestion Study means an assessment to determine whether transmission upgrades can reduce the overall cost of reliably serving the forecasted needs of the Transmission Provider and its Transmission Customers taking service under the Tariff.

**1.18 Economic Study Request or Economic Congestion Study Request** Economic Study Request or Economic Congestion Study Request means a written request submitted by an Eligible Customer or stakeholder to the Transmission Provider, asking the Transmission Provider to model the ability of specific upgrades or other investments to the Transmission System or Demand Resources, not otherwise considered in the Local Transmission Plan, to reduce the cost of reliably serving the forecasted needs of the Transmission Provider and its Transmission Customers. Economic Study Requests are used in the context of Local Economic Study Request, Regional Economic Study Request, and Interconnection-wide Economic Study Request.

**1.19 Economic Study Request Form**

Economic Study Request Form means the form posted on NTTG’s website used to submit an Economic Study Request as referenced in Section 22.1.

**1.20 Finance Agent Agreement**

The Finance Agent Agreement is Exhibit B to the Funding Agreement and identifies the entity responsible for performing the finance agent tasks set forth in the Funding Agreement.

**1.21 Funding Agreement**

Funding Agreement refers to the current version of the agreement among the entities funding the activities of NTTG. The Funding Agreement is available on the NTTG Website.

**1.22 Incumbent Transmission Developer**

Incumbent Transmission Developer refers to an entity that develops a transmission project within its own retail distribution service territory or footprint.

**1.23 Interconnection-wide Economic Study Request**

An Interconnection-wide Economic Study Request means an Economic Study Request where there is a Point of Receipt or Point of Delivery within the NTTG Footprint, as determined by the Planning Committee, and its Point of Delivery or Point of Receipt, are both respectively within the Western Interconnection and outside the NTTG Footprint. In the alternative, if the Economic

Study Request is reasonably determined by the Planning Committee to be an Interconnection-wide Economic Study Request from a geographical and electrical perspective, including, but not limited to, an evaluation determining that the study request utilizes only WECC member interconnected transmission systems, the study request will be considered an Interconnection-wide Economic Study Request.

#### **1.24 Initial Regional Transmission Plan (“IRTP”)**

Initial Regional Transmission Plan is defined in Section 18.3.2 to include projects included in the prior Regional Transmission Plan and projects included in the Full Funders Local Transmission Plans.

#### **1.25 Local Economic Study Request**

A Local Economic Study Request means an Economic Study Request where (1) the Point(s) of Receipt and Point(s) of Delivery that are all within the Transmission System of the Transmission Provider and the Point(s) of Receipt and Point(s) of Delivery utilize only the Transmission Provider’s scheduling paths, or (2) is otherwise reasonably determined by the Planning Committee (if the request is received by the NTTG Planning Committee) or the Transmission Provider (if the request is received by the Transmission Provider) to be a local request from a geographical and electrical perspective, including, but not limited to, an evaluation determining that the study request does not affect other interconnected transmission systems.

#### **1.26 Local Transmission Plan or LTP**

Local Transmission Plan or LTP means the transmission plan of the Transmission Provider that identifies the upgrades and other investments to the Transmission System and Demand Resources necessary to reliably satisfy, over the planning horizon, the following: Network Customers’ resource and load growth expectations for designated Network Load and Network Resource additions; Transmission Provider’s resource and load growth expectations for Native Load Customers; Transmission Provider’s transmission obligation for Public Policy Requirements; Transmission Provider’s obligations pursuant to grandfathered, non-OATT agreements; and Transmission Provider’s Point-To-Point Transmission Service customers’ projected service needs, including obligations for rollover rights.

#### **1.27 LTP Re-Study Request**

LTP Re-Study Request means a request by an Eligible Customer to model the ability of specific upgrades or other investments to the Transmission System or Demand Resources, not otherwise considered in the draft Local Transmission Plan (produced pursuant to Section 2 of Attachment K), to reduce the cost of reliably serving the forecasted needs of the Transmission Provider and its customers set forth in the Transmission System Plan.

#### **1.28 Merchant Transmission Developer**

Merchant Transmission Developer refers to an entity that assumes all financial risk for developing and constructing its transmission project. A Merchant Transmission Developer recovers the costs



of constructing the proposed transmission project through negotiated rates instead of cost-based rates. A Merchant Transmission Developer does not seek to allocate the costs associated with its merchant transmission facilities to other entities.

### **1.29 Monetized Non-Financial Incremental Costs**

*Monetized Non-Financial Incremental Costs* are defined in Section 18.4.1.

### **1.30 NTTG**

*NTTG* means the Northern Tier Transmission Group or its successor.

### **1.31 NTTG Footprint**

NTTG Footprint means the geographic area comprised of the Transmission Systems in the Western Interconnection of the entities enrolled in NTTG as Full Funders.

### **1.32 NTTG Website**

NTTG Website means [www.nttg.biz](http://www.nttg.biz).

### **1.33 Nonincumbent Transmission Developer**

Nonincumbent Transmission Developer refers to two categories of transmission developer: (1) a transmission developer that does not have a retail distribution service territory or footprint; and (2) a public utility transmission provider that proposes a transmission project outside of its existing retail distribution service territory or footprint, where it is not the incumbent for purposes of that project.

### **1.34 Original Project**

A project selected in the prior Regional Transmission Plan.

### **1.35 Ownership-Like Rights**

*Ownership-Like Rights* are defined in Section 19.2.2.

### **1.36 Planning Committee**

Planning Committee is defined in Section 12.2

### **1.37 Planning Committee Charter**

Planning Committee Charter means that document attached as Exhibit C to this Attachment K.

### **1.38 Project Sponsor**

Project Sponsor is defined in Section 18.1.1 as the Nonincumbent Transmission Provider or Incumbent Transmission Provider intending to develop the project that is submitted into the planning process.

### **1.39 Public Policy Considerations**

Public Policy Considerations means those public policy considerations that are not established by local, state, or federal laws or regulations.

### **1.40 Public Policy Requirements**

Public Policy Requirements means those public policy requirements that are established by local, state, or federal laws or regulations, meaning enacted statutes (i.e., passed by the legislature and signed by the executive) and regulations promulgated by a relevant jurisdiction.

### **1.41 Regional Economic Study Request**

A Regional Economic Study Request means an Economic Study Request where (1) Point(s) of Receipt and Point(s) of Delivery are all within the NTTG Footprint, as determined by the Transmission Provider (if the request is received by the Transmission Provider) or the NTTG Planning Committee (if the request is received by the Planning Committee), and the Point(s) of Receipt and Points(s) of Delivery utilize only Funding Agreement member scheduling paths, or (2) is otherwise reasonably determined by the Transmission Provider or Planning Committee to be a regional request from a geographical and electrical perspective, including, but not limited to, an evaluation determining that the study request utilizes the interconnected transmission systems of Funding Agreement members.

**1.42 Regional Planning Cycle** Regional Planning Cycle means NTTG's eight-quarter biennial planning cycle that commences in even-numbered years and results in the Regional Transmission Plan.

**1.43 Regional Transmission Plan** Regional Transmission Plan means the current final regional transmission plan, as approved by the Steering Committee.

### **1.44 Sponsor Qualification Data Form**

Sponsor Qualification Data Form means the form posted on NTTG's website used to submit sponsor qualification data for a proposed Sponsored Project as referenced in Sections 18.1.2 and 18.5.2.

**1.45 Sponsored Project** Sponsored Project means the project proposed by a Project Sponsor.

**1.46 Steering Committee** Steering Committee is defined in Section 12.2.

**1.47 Steering Committee Charter** Steering Committee Charter means that document attached as Exhibit B to this Attachment K.

**1.48 TEPPC** TEPPC means Transmission Expansion Planning Policy Committee or its successor committee within WECC.

**1.49 WECC** WECC means the Western Electricity Coordinating Council or its successor.

## **Part A. Local Planning Process**

### **2 PREPARATION OF A LOCAL TRANSMISSION PLAN**

**2.1 Local Transmission Plan** With the input of affected stakeholders, Transmission Provider shall prepare one (1) Local Transmission Plan during each two-year study cycle. The Transmission Provider shall evaluate the Local Transmission Plan by modeling the effects of up to two (2) Economic Study Requests per each two-year study cycle, if timely requests are submitted by Eligible Customers and/or stakeholders in accordance with Sections 3 and 7, below. The planning horizon for the Local Transmission Plan consists of a Near Term Case (years 1-5) and Longer Term Case (years 6-10). If an Eligible Customer's request submitted through the Tariff process specifically identifies a future new resource location on a 20-year horizon, the Longer Term Case will be extended to years 6-20. Although the Local Transmission Plan is developed biannually, the Transmission Provider annually assesses the plan.

**2.2 Transmission Service Request Impacts** The Local Transmission Plan does not effectuate any transmission service requests or designation of future Network Resources. A transmission service request must be made as a separate and distinct submission by an Eligible Customer in accordance with the procedures set forth in the Tariff and posted on the Transmission Provider's OASIS. The Local Transmission Plan does fulfill the Transmission Provider's obligation to plan for and provide for future Network Customers' and Native Load Customers' load growth by identifying required Transmission System capacity additions to be constructed over the Planning Horizon.

**2.3 Integrated Resource Planning** The Transmission Provider shall take the Local Transmission Plan into consideration, to the extent required by state law, when preparing its next state required integrated resource plan and, as appropriate, when preparing studies such as Interconnection Feasibility Studies, System Impact Studies, and Facilities Studies.

### **3 COORDINATION**

**3.1 Study Cycle** Transmission Provider shall prepare the Local Transmission Plan during an eight (8) quarter study cycle. The responsibility for the Local Transmission Plan shall remain with the Transmission Provider who may accept or reject in whole or in part, the comments of any stakeholder unless prohibited by applicable law or regulation. If any material comments are rejected, documentation explaining why shall be maintained as part of the Local Transmission Plan records kept on OASIS as described in Section 5 and subsection f.

## 3.2 Sequence of Events

### 3.2.1 Quarter 1

Transmission Provider will select Near Term summer/winter base cases from WECC; gather and allocate aggregate loads and load growth forecasts for Network Customers; gather and allocate aggregate load forecasts for Native Customers (based on annual updates and other information that may be available); identify any new generation resources and any expected or planned Demand Resources and their associated impacts on demand and peak demand for Network and Native Load Customers (based on its state mandated integrated resource plan, to the extent that such an obligation exists, or through other planning resources); identify point-to-point transmission service customers' projections for service at each receipt and delivery point (based on information submitted by the customer to the Transmission Provider) including projected use of rollover rights; and gather transmission needs driven by Public Policy Requirements and Public Policy Considerations submitted by all stakeholders. The Transmission Provider shall take into consideration, to the extent known or which may be obtained from its Transmission Customers and active queue requests, contractual obligations that will either commence or terminate during the applicable study window. Any stakeholder may submit data to be evaluated as part of the preparation of the draft Near Term Local Transmission Plan, and/or the development of sensitivity analyses, including alternative solutions to the identified needs set out in prior Near Term Local Transmission Plans and Public Policy Considerations and Requirements and transmission needs driven by Public Policy Considerations and Requirements. In doing so, the stakeholder shall submit the data as specified in the Transmission Provider's "Business Practice: Transmission Planning," available on Transmission Provider's OASIS at: [http://www.oatiaoasis.com/PGE/PGEdocs/Transmission\\_Planning.pdf](http://www.oatiaoasis.com/PGE/PGEdocs/Transmission_Planning.pdf). All stakeholder submissions, including transmission needs driven by Public Policy Requirements and Public Policy Considerations, will be evaluated on a basis comparable to data and submissions required for planning the transmission system for both retail and wholesale customers, and alternative proposals, including proposals driven by Public Policy Requirements and Public Policy Considerations, will be evaluated based on a comparison of their relative economics and ability to meet reliability criteria. During Quarter 1, the Transmission Provider will also accept and consider Economic Study Requests timely submitted in accordance with Section 7. A regional or interregional Project Sponsor may submit information for their project to the local transmission provider or Planning Committee for consideration in the Regional Transmission Plan. This project data submission process is described in Section 18.

Out of the set of Public Policy Considerations and Requirements received in Quarter 1, the Transmission Provider, on behalf of its customers and considering the input of stakeholders, including any participating regulatory authority, will separate the transmission needs driven by public policy into the following:

- Those needs driven by Public Policy Requirements that will be evaluated in the transmission planning process that develops the Near Term Local Transmission Plan.
- Those needs driven by Public Policy Requirements and Public Policy Considerations that will be used in the development of sensitivity analyses.

- Those needs driven by Public Policy Considerations that will not otherwise be evaluated.

Transmission Provider will post on its OASIS website an explanation of which transmission needs driven by public policy will be evaluated for potential solutions in the biennial transmission planning process and an explanation of why other suggested transmission needs driven by public policy will not be evaluated.

Once identified, the Public Policy Requirements driving transmission needs will not be revised by the Transmission Provider during the development of the Near Term Local Transmission Plan unless unforeseen circumstances require a modification to the identified Public Policy Requirements driving transmission needs. In this instance, stakeholders will be consulted before the Public Policy Requirements driving transmission needs are modified.

The evaluation process and selection criteria for inclusion of transmission needs driven by Public Policy Requirements in the Near Term Local Transmission Plan will be the same as those used for any other local project in the Near Term Local Transmission Plan. In its technical analysis, the Transmission Provider will insert the transmission needs driven by Public Policy Requirements in the transmission planning process to be jointly evaluated with other local projects, rather than considering transmission needs driven by Public Policy Requirements separately from other transmission needs.

The process by which transmission needs driven by Public Policy Requirements and Public Policy Considerations will be received, reviewed and evaluated is described in the Transmission Provider's "Business Practice: Transmission Planning," available on Transmission Provider's OASIS at: [http://www.oatiaoasis.com/PGE/PGEdocs/Transmission\\_Planning.pdf](http://www.oatiaoasis.com/PGE/PGEdocs/Transmission_Planning.pdf).

### 3.2.2 Quarter 2

Transmission Provider will define and post on OASIS the basic methodology, criteria, assumptions, databases, and processes the Transmission Provider will use to prepare the Near Term Local Transmission Plan. The Transmission Provider will insert its system detail in Near Term summer and winter peak WECC base cases for purposes of conducting its studies; assess the timely submitted Economic Study Requests for the summer/winter WECC base cases using the previous biennial cycle's Local Transmission Plan as a reference; and select one Economic Study for evaluation during the current biennial cycle.

### 3.2.3 Quarters 3 and 4

Transmission Provider will select Longer Term summer/winter base cases from WECC; identify project needs, schedule for implementation, and cost responsibility; prepare and post on Transmission Provider's OASIS a draft Near Term Local Transmission Plan. Any stakeholder may submit comments; changes to the data provided in Quarter 1; additional information about new or changed circumstances relating to loads, resources, and transmission projects; or alternative solutions to be evaluated as part of the Near Term Local Transmission Plan. All

comments, data, and information shall be submitted as specified in the Transmission Provider's "Business Practice: Transmission Planning", available on Transmission Provider's OASIS at:

[http://www.oatiaoasis.com/PGE/PGEdocs/Transmission\\_Planning.pdf](http://www.oatiaoasis.com/PGE/PGEdocs/Transmission_Planning.pdf). All stakeholder submissions will be evaluated on a basis comparable to data and submissions required for planning the transmission system for both retail and wholesale customers, and alternative proposals will be evaluated based on a comparison of their relative economics and ability to meet reliability criteria. The Transmission Provider may elect to post interim iterations of the draft Near Term Local Transmission Plan, consider economic modeling results, and solicit public comment prior to the end of the applicable quarter. Transmission Provider will post on its OASIS the 30-day notice for its public meeting to present, solicit, and receive comments on Transmission Provider's draft Near Term Local Transmission Plan, and Transmission Provider will subsequently conduct the public meeting to review the draft Near Term Local Transmission Plan. Transmission Provider will finalize the Near Term Local Transmission Plan taking into account (1) the Economic Study Request modeling results, if any; (2) written comments received from the owners and operators of interconnected transmission systems; (3) written comments received from Transmission Customers and other stakeholders; and (4) timely comments submitted during the public meetings, as set forth in Section 3.3, below.

#### 3.2.4 Quarter 4

Transmission Provider will finalize annual assessment of its Near Term Local Transmission Plan; include updated information on loads, resources, and existing transmission projects; and add new projects.

#### 3.2.5 Quarter 5

Transmission Provider will gather and allocate aggregate loads and load growth forecasts for Network Customers; gather and allocate aggregate load forecasts for Native Load Customers (based on annual updates and other available information); identify any new generation resources and any expected or planned Demand Resources and their associated impacts on demand and peak demand for Network and Native Load Customers (based on its state mandated integrated resource plan, to the extent that such an obligation exists, or through other planning resources); identify point-to-point transmission service customers' projections for service at each receipt and delivery point (based on information submitted by the customer to the Transmission Provider) including projected use of rollover rights; and gather transmission needs driven by Public Policy Requirements and Public Policy Considerations submitted by all stakeholders. The Transmission Provider shall take into consideration, to the extent known or which may be obtained from its Transmission Customers and active queue requests, contractual obligations that will either commence or terminate during the applicable study window. Any stakeholder may submit data to be evaluated as part of the preparation of the draft Longer Term Local Transmission Plan, and/or the development of sensitivity analyses, including alternative solutions to the identified needs set out in prior Longer Term Local

Transmission Plans and Public Policy Considerations and Requirements and transmission needs driven by Public Policy Considerations and Requirements. In doing so, the stakeholder shall submit the data and/or proposals as specified in the Transmission Provider's "Business Practice: Transmission Planning," available on Transmission Provider's OASIS at:

[http://www.oatiaoasis.com/PGE/PGEdocs/Transmission\\_Planning.pdf](http://www.oatiaoasis.com/PGE/PGEdocs/Transmission_Planning.pdf). All stakeholder submissions, including transmission needs driven by Public Policy Requirements and Public Policy Considerations, will be evaluated on a basis comparable to data and submissions required for planning the transmission system for both retail and wholesale customers, and alternative proposals, including proposals driven by Public Policy Requirements and Public Policy Considerations, will be evaluated based on a comparison of their relative economics and ability to meet reliability criteria. The Transmission Provider will define and post on its OASIS the basic methodology, criteria, assumptions, databases, and processes that will be used to prepare the Longer Term Local Transmission Plan; reassess the Near Term Local Transmission Plan developed in Quarter 3, to include relevant customer input; and accept Economic Study Requests if timely submitted in accordance with Section 7.

Out of the set of Public Policy Considerations and Requirements received in Quarter 5, the Transmission Provider, on behalf of its customers and considering the input of stakeholders, including any participating regulatory authority, will separate the transmission needs driven by public policy into the following:

- Those needs driven by Public Policy Requirements that will be evaluated in the transmission planning process that develops the Longer Term Local Transmission Plan.
- Those needs driven by Public Policy Requirements and Public Policy Considerations that will be used in the development of sensitivity analyses.
- Those needs driven by Public Policy Considerations that will not otherwise be evaluated.

Transmission Provider will post on its OASIS website an explanation of which transmission needs driven by public policy will be evaluated for potential solutions in the biennial transmission planning process and an explanation of why other suggested transmission needs driven by public policy will not be evaluated.

Once identified, the Public Policy Requirements driving transmission needs will not be revised by the Transmission Provider during the development of the Longer Term Local Transmission Plan unless unforeseen circumstances require a modification to the identified Public Policy Requirements driving transmission needs. In this instance, stakeholders will be consulted before the Public Policy Requirements driving transmission needs are modified.

The evaluation process and selection criteria for inclusion of transmission needs driven by Public Policy Requirements in the Longer Term Local Transmission Plan will be the same as those used

for any other local project in the Local Transmission Plan. In its technical analysis, the Transmission Provider will insert the transmission needs driven by Public Policy Requirements in the transmission planning process to be jointly evaluated with other local projects, rather than considering transmission needs driven by Public Policy Requirements separately from other transmission needs.

The process by which transmission needs driven by Public Policy Requirements and Public Policy Considerations will be received, reviewed and evaluated is described in the Transmission Provider's "Business Practice: Transmission Planning," available on Transmission Provider's OASIS at: [http://www.oatioasis.com/PGE/PGEdocs/Transmission\\_Planning.pdf](http://www.oatioasis.com/PGE/PGEdocs/Transmission_Planning.pdf).

### 3.2.6 Quarter 6

Transmission Provider will assess the timely submitted Economic Study Requests for the summer/winter WECC base cases using the previous biennial cycle's Local Transmission Plan as a reference; and select one Economic Study for evaluation during the current biennial cycle.

### 3.2.7 Quarters 7 and 8

Transmission Provider will prepare and post on its OASIS a draft Longer Term Local Transmission Plan. Any stakeholder may submit comments; changes to the data provided in Quarter 5; additional information about new or changed circumstances relating to loads, resources, and transmission projects; or alternative solutions to be evaluated as part of the Longer Term Local Transmission Plan. All comments, data, and information shall be submitted as specified in the Transmission Provider's "Business Practice: Transmission Planning", available on Transmission Provider's OASIS at: [http://www.oatioasis.com/PGE/PGEdocs/Transmission\\_Planning.pdf](http://www.oatioasis.com/PGE/PGEdocs/Transmission_Planning.pdf). All stakeholder submissions will be evaluated on a basis comparable to data and submissions required for planning the transmission system for both retail and wholesale customers, and alternative proposals will be evaluated based on a comparison of their relative economics and ability to meet reliability criteria. Transmission Provider may elect to post interim iterations of the draft Longer Term Local Transmission Plan, consider economic modeling results, and solicit public comment prior to the end of the applicable quarter. Transmission Provider will post on its OASIS the 30-day notice for its public meeting to present, solicit, and receive comments on its draft Longer Term Local Transmission Plan, and Transmission Provider will subsequently conduct the public meeting to review the draft Longer Term Local Transmission Plan. Transmission Provider will finalize the Longer Term Local Transmission Plan taking into account (1) the Economic Study Request modeling results, if any; (2) written comments received from the owners and operators of interconnected transmission systems; (3) written comments received from Transmission Customers and other stakeholders; and (4) timely comments submitted during public meetings, as set forth in Section 3.3, below.

### 3.2.8 Quarter 8



Transmission Provider will submit its finalized Near Term and Longer Term Transmission Plan to (1) regional and interregional entities conducting similar types of planning efforts, (2) interested stakeholders, and (3) owners and operators of the neighboring interconnected transmission system.

**3.3 Public Meetings at Study Milestones** The Transmission Provider shall conduct a public meeting semiannually in order to present a status report on the development of the Local Transmission Plan, summarize the substantive results of the associated study process(es), present drafts of documents, and receive comments. The meetings shall be open to all stakeholders, including but not limited to Eligible Customers, other transmission providers, federal, state and local commissions and agencies, trade associations, and consumer advocates. The date and time of the public meeting shall be posted on Transmission Provider's OASIS, and may be held on no less than ten (10) business days' notice. The location of the public meeting shall be as selected by the Transmission Provider, or may be held telephonically or by video or Internet conference.

**3.4 Regional Plan** Transmission Provider will participate in a regional transmission planning process that produces a regional transmission plan and complies with the transmission planning principles of Order Nos. 890 and 1000.

## **4 INFORMATION EXCHANGE**

### **4.1 Forecasts**

#### **4.1.1 Transmission Customer Submissions**

Each Transmission Customer taking service under Part II of the Tariff, or which has an accepted reservation in the transmission queue to take service in a future period under Part II of the Tariff shall, during Quarters 1 and 5 of each Regional Planning Cycle, submit to the Transmission Provider a good-faith Near Term Case and Longer Term Case forecast of the actual energy to be moved in each direction across each posted transmission path, including anticipated termination, expiration, or exercising of rollover rights for each service. The forecast shall specify the hourly values for the forecast period, or conversely provide an annual hourly shape to be applied to the forecast period. If prior to Quarters 1 and 5 of the current planning cycle, the Transmission Customer has recently submitted to the Transmission Provider a valid forecast encompassing the current Planning Horizon, the Transmission Customer may provide a new forecast or provide any material changes or adjustments and reaffirm the existing forecast for use in the current planning cycle.

#### **4.1.2 Network Customer and Native Load Submissions**

Representatives of each Network Customer and of all Native Load Customers shall, during Quarters 1 and 5 of each Regional Planning Cycle, submit to the Transmission Provider a good-faith Near Term Case and Longer Term Case load forecast including existing and planned Demand Resources and their impacts on

demand and peak demand. This obligation may be satisfied through submission of annual updates as required by the Tariff. If prior to Quarters 1 and 5 of the current planning cycle, a valid forecast encompassing the current Planning Horizon has been submitted recently to the Transmission Provider, then a new forecast or any material changes or adjustments may be provided to the Transmission Provider in order to reaffirm the existing forecast for use in the current planning cycle. The forecast shall specify the hourly values for the forecast period, or conversely provide an annual hourly shape to be applied to the forecast period.

#### 4.1.1 Stakeholder Submission of Public Policy Requirements and Public Policy Considerations

All stakeholders have the opportunity to submit transmission needs driven by Public Policy Requirements and Public Policy Considerations during Quarter 1 and Quarter 5 of the biennial planning cycle.

**4.2 Participation in the Planning Process** If any Eligible Customer or stakeholder fails to provide data or otherwise participate as required by any part of this Attachment K, the Transmission Provider cannot effectively include such needs in the Transmission Provider’s planning process. If any Network Customer (including the representative on behalf of Native Load Customers) fails to timely provide data or otherwise participate as required by this Attachment K, the Transmission Provider shall plan the system based upon the most recent data available, subject to review and modification by other participants.

## 5 TRANSPARENCY

### 5.1 **OASIS Requirements**

#### 5.1.1 Transmission Planning Folder

The Transmission Provider shall maintain a “Transmission Planning” folder on the publicly accessible portion of its OASIS to distribute information related to this Attachment K.

#### 5.1.2 Contact Information

The Transmission Provider shall also develop and maintain on the publicly accessible portion of OASIS contact information whereby any person may request to receive materials related to the Local Transmission Plan process.

**5.2 Content of OASIS Postings** Transmission Provider shall post or provide links to publicly available documents, as applicable, in the “Transmission Planning” folder on its OASIS, including the following:

- a. Any transmission planning business practices along with the procedures for modifying the business practices;

- b. Study cycle timeline;
- c. A form to submit an Economic Study Request, along with a document listing the number of study requests received by the Transmission Provider in the study cycle, the number of study requests rejected, the number of studies completed, and a summary of any study results produced subject to confidentiality requirements;
- d. The details of each public meeting required by this Attachment K, or any other public meeting related to transmission planning conducted by the Transmission Provider;
- e. In advance of its discussion at any public meeting, all materials to be discussed;
- f. As soon as reasonably practical after the conclusion of each public meeting, notes of the planning information discussed at the public meeting;
- g. Substantive written comments submitted in relation to the Local Transmission Plan, and an explanation regarding acceptance or rejection of such comments;
- h. A list and explanation of which transmission needs driven by public policy received during Quarter 1 and Quarter 5 will be evaluated in the biennial planning process and explanation as to why other suggested transmission needs driven by public policy received during Quarter 1 and Quarter 5 will not be evaluated;
- i. The draft, interim (if any), and final version of the current Local Transmission Plan;
- j. The final version of all completed Local Transmission Plans for the previous five study periods;
- k. Basic methodology, criteria, assumptions, databases, and processes used to prepare the Near Term Local Transmission Plan and the Longer Term Local Transmission plan as described in Sections 3.2.2 and 3.2.5;
- l. Summary list of any Critical Energy Infrastructure Information submitted or used during the planning process;
- m. A link to the NTTG and WECC websites; and
- n. Information describing the extent that the Transmission Provider has undertaken a commitment to build a transmission facility included in NTTG's Regional Transmission Plan.

**5.3 Database Access** In accordance with the database access rules established by the WECC, a stakeholder may receive access from the Transmission Provider to the database, and all changes to the database, relied upon by the Transmission Provider in preparing the Local Transmission Plan, upon its certification to the Transmission Provider that the stakeholder is permitted to access such database. Unless expressly ordered to do so by a court of competent jurisdiction or regulatory agency, the Transmission Provider has no obligation to disclose database information to any stakeholder that does not qualify for access.

## **6 COST ALLOCATION**

Cost allocation principles expressed here are applied in a planning context for purposes of transparency and do not supersede cost obligations as determined by other parts of the Tariff, which include but are not limited to transmission service requests, generation interconnection requests, Network Upgrades, or Direct Assignment Facilities, or as may be determined by any state having jurisdiction over the Transmission Provider.

**6.1 Individual Transmission Service Request Costs Not Considered** The costs of upgrades or other transmission investments subject to an existing transmission service request submitted pursuant to Transmission Provider's Tariff are evaluated in the context of that transmission service request. Nothing contained in this Attachment K shall relieve or modify the obligations of the Transmission Provider or the requesting Transmission Customer that they may have under Transmission Provider's Tariff.

**6.2 Categories of Included Costs** The Transmission Provider shall categorize projects set forth in the Local Transmission Plan, for purposes of allocating costs, into the following types:

- a. Type 1: Type 1 transmission line costs are those related to the provision of service to the Transmission Provider's Native Load Customers. Type 1 costs include, to the extent such agreements exist, costs related to service to others pursuant to grandfathered transmission agreements that are considered by the Transmission Provider to be Native Load Customers.
- b. Type 2: Type 2 costs are those related to the sale or purchase of power at wholesale to non-Native Load Customers.
- c. Type 3: Type 3 costs are those incurred specifically as alternatives to (or deferrals of) transmission line costs (typically Type 1 projects), such as the installation of distributed resources (including distributed generation, load management and energy efficiency). Type 3 costs do not include Demand Resources projects, which do not have the effect of deferring or displacing Type 1 costs.

**6.3 Cost Allocation Principles** Unless an alternative cost allocation process is utilized and described in the Local Transmission Plan, the Transmission Provider shall identify anticipated cost allocations in the Local Transmission Plan based upon the end-use characteristics of the project according to categories of costs set forth above and the following principles:

- a. Principle 1: The Commission’s regulations, policy statements and precedent on transmission pricing shall be followed.
- b. Principle 2: To the extent not in conflict with Principle 1, costs will be allocated consistent with the provisions of Section 19 of this Attachment K.

**6.4 Rate Recovery** Notwithstanding any other section of this Attachment K, Transmission Provider will not assume cost responsibility for any project if the cost of the project is not reasonably expected to be recoverable in its retail and/or wholesale rates.

## **7 LOCAL ECONOMIC STUDIES**

### **7.1 Submission Windows**

Local Economic Study Requests may be submitted in Quarters 1 and 5 of each local planning cycle, and must be received by March 31<sup>st</sup> of each year. A Local Economic Study Request is submitted to the Transmission Provider using the Economic Study Request Form found on the NTTG Website. Transmission Provider will review submissions for completeness as set forth in Section 22.2, and will categorize and process submissions as set forth in Section 22.3.

### **7.2 Local Economic Studies Performed**

Transmission Provider will complete up to two (2) Local Economic Studies per local planning cycle. By June 30<sup>th</sup> each year, the Transmission Provider will determine the Local Economic Study(ies) to be performed by the end of the respective Quarter 4 or 8 of the local planning cycle. If the Local Economic Study cannot be completed by the end of the respective Quarter 4 or 8 of the local planning cycle,, the Transmission Provider will notify the study request sponsor of the delay, provide an explanation of the delay, and provide an estimated completion date. If the Transmission Provider receives more than two (2) Local Economic Study Requests during a local planning cycle, it will prioritize the requests and determine which Local Economic Study Request(s) will be performed based on an evaluation of the following:

- a. The most significant opportunities to reduce overall costs of the Local Transmission Plan while reliably serving the load growth needs being studied in the Local Transmission Plan, and
- b. Input from stakeholders.

The Transmission Provider shall notify the entities submitting Local Economic Study Requests of its decision.

**7.3 Additional Studies** The Transmission Provider will complete additional Local Economic Study Requests at the sole expense of the parties requesting such studies. A stakeholder shall request an additional study within ten (10) business days of receiving the notice provided for in provided for in Section 22.2, by emailing the Transmission Provider as provided for in its business practices. Following such notice, Transmission Provider will tender a study agreement

that addresses, at a minimum, cost recovery for the Transmission Provider and schedule for completion. The requesting party shall be responsible for the actual cost of the additional regional economic study.

**7.4 Clustering Studying Requests** The Transmission Provider will cluster and study together Local Economic Study Requests if all of the Point(s) of Receipt and Point(s) of Delivery match one another or, in the alternative, it is reasonably determined by the Transmission Provider that the Local Economic Study Requests are geographically and electrically similar, and can be feasibly and meaningfully studied as a group.

**7.5 Unaccommodated Economic Study Requests** All Local Economic Study Requests not accommodated within the current study cycle will be deemed withdrawn and returned to the stakeholder without action and the stakeholder may submit the Economic Study Request in the next Regional Planning Cycle.

**7.6 Study Schedule In** In Quarters 1 and 5, Local Economic Study Requests are submitted by stakeholders to the Transmission Provider. In Quarters 2 and 6, study plans are developed by the Transmission Provider for the Local Economic Study Requests that will be modeled. In Quarters 3 and 7, Local Economic Studies are performed by the Transmission Provider or under the Transmission Provider's direction. In Quarters 4 and 8, results of the Local Economic Studies are reported by the Transmission Provider in the Draft Local Transmission Plan and the Local Transmission Plan, respectively, and provided to the requesting party.

## **8 RECOVERY OF PLANNING COSTS**

Unless Transmission Provider allocates planning-related costs to an individual stakeholder as set out herein, or as otherwise permitted under the Tariff, all costs incurred by the Transmission Provider related to the Local Transmission Plan process or the regional, interregional, or interconnection-wide planning processes shall be included in the Transmission Provider's transmission rate base.

## **9 DISPUTE RESOLUTION – LOCAL PLANNING PROCESS**

**9.1 Process** The following process shall be utilized to address procedural and substantive concerns over the Transmission Provider's compliance with this Part A (Local Planning Process) of Attachment K and related transmission business practices:

- a. Step 1: Any stakeholder may initiate the dispute resolution process by sending a letter to the Transmission Provider that describes the dispute. Upon receipt of such letter, the Transmission Provider shall set a meeting for the senior representatives of each of the disputing parties, at a time and place convenient to such parties, within 30 days after receipt of the dispute letter. The senior representatives shall engage in direct dialogue, exchange information as necessary, and negotiate in good faith to resolve the dispute. Any other stakeholder that believes it has an interest in the dispute may participate. The senior representatives will continue to negotiate until such time as: (i) the dispute letter is withdrawn; (ii) the parties agree to a mutually acceptable

resolution of the disputed matter, or (iii) after 60 days, the parties remain at an impasse.

- b. Step 2: If Step 1 results in an impasse, the next step shall be mediation among those parties, involved in the dispute identified in Step 1, that are willing to mediate. The parties to the mediation shall share equally the costs of the mediator and shall each bear their own respective costs. Upon agreement of the parties, the parties may request that the Commission's Dispute Resolution Service serve as the mediator of the dispute.

**9.2 Confidential Nature of Negotiations** All negotiations and proceedings pursuant to this process are confidential and shall be treated as compromise and settlement negotiations for purposes of applicable rules of evidence and any additional confidentiality protections provided by applicable law.

**9.3 Timely Submission of Disputes to Ensure Completion of the Local Transmission Plan** Disputes over any matter shall be raised timely; provided, however, to facilitate timely completion of the Local Transmission Plan, in no case shall a dispute as set forth in Section 9.1 be raised more than 30 days after a decision is made in the study process or the posting of a milestone document, whichever is earlier.

**9.4 Rights** Nothing contained in this Section 9 shall restrict the rights of any party to file a complaint with the Commission under relevant provisions of the Federal Power Act.

## **10 TRANSMISSION PLANNING BUSINESS PRACTICE**

The Transmission Provider has developed and posted on its OASIS at: [http://www.oatioasis.com/PGE/PGEdocs/Transmission\\_Planning.pdf](http://www.oatioasis.com/PGE/PGEdocs/Transmission_Planning.pdf) its Transmission Planning Business Practices that is intended to provide access to additional information to assist one's understanding of how the Transmission Provider will carry out its duties and responsibilities under this Attachment K, and how one can participate in Transmission Provider's biennial planning process. To the extent necessary, as determined by the Transmission Provider, the Transmission Planning Business Practice shall include: forms for submitting an Economic Study Request; a schedule and sequence of events for preparing the Local Transmission Plan; additional details associated with cost allocation; a description of the regional and interconnection-wide planning processes which the Local Transmission Plan will support; a description of how the Local Transmission Plan will be considered in the Transmission Provider's next state required integrated resource plan; a list of the transmission systems to which the Transmission Provider's System is directly interconnected; and contact information for the individual(s) responsible for implementation of this Attachment K. Within its Transmission Planning Business Practice, the Transmission Provider may also post documents, or links to publicly available information, that further explain its planning obligations and/or processes as set out in this Attachment K.

## **11 OPENNESS**

**11.1 Participation** All affected stakeholders may attend Local Transmission Plan meetings and/or submit comments, submit Economic Study Requests, or provide other information

relevant to the planning process. Committees or working groups may be established as part of the planning process to facilitate specific planning efforts.

**11.2 Critical Energy Infrastructure Information (“CEII”)** Any stakeholder and the Transmission Provider must agree to adhere to the Commission’s guidelines concerning CEII. Additional information concerning CEII, including a summary list of the data that is determined by the supplying party to be deemed CEII, shall be posted on the Transmission Provider’s OASIS, and updated regularly.

**11.3 Confidential Information** In the event that any party claims that planning-related information is confidential, any party seeking access to such information must agree to adhere to the terms of the Confidentiality Agreement. The form of Transmission Provider’s Confidentiality Agreement shall be posted on the Transmission Provider’s OASIS. Confidential information shall be disclosed in compliance with Standards of Conduct, and provided only to those participants in the planning process that require such information and that execute the Confidentiality Agreement; provided, however, any such information may be supplied to (i) federal, state or local regulatory authorities that request such information and protect such information subject to non-disclosure regulations, or (ii) upon order of a court of competent jurisdiction.

## **Part B. Regional Planning Process Governance and Participation**

### **12 GOVERNANCE**

**12.1 About NTTG** NTTG is a trade name of the utilities and state representatives that are participating in the development of a Regional Transmission Plan that evaluates whether transmission needs within the NTTG Footprint may be satisfied on a regional and interregional basis more efficiently or cost effectively than through local planning processes. While the Regional Transmission Plan is not a construction plan, it provides valuable regional insight and information for all stakeholders (including developers) to consider and use in their respective decision-making processes.

**12.2 Committees** NTTG has four standing committees: Steering Committee, Planning Committee, Cost Allocation Committee, and transmission use committee. The Steering Committee, which operates pursuant to the Steering Committee Charter, is charged with the tasks of approving the Regional Transmission Plan in accordance with this Attachment K, and governing the activities of NTTG. The Planning Committee, which is governed by the Planning Committee Charter, is charged with the task of producing the Regional Transmission Plan (inclusive of regional Economic Congestion Studies) in accordance with this Attachment K. The Cost Allocation Committee, which is governed by the Cost Allocation Committee Charter, is charged with the task of allocating costs to Beneficiaries of transmission projects selected into the Regional Transmission Plan for cost allocation purposes in accordance with this Attachment K. The transmission use committee, which is governed by the transmission use committee charter, and acts outside the scope of this Attachment K, and is responsible for increasing the efficiency of



the transmission system through commercially reasonable initiatives and increasing customer knowledge of, and transparency into, the transmission system.

### **13 PARTICIPATION THROUGH ENROLLMENT OR MEMBERSHIP**

**13.1 Enrollment** Enrollment obligations are specified in Section 13.3 below. An entity may enroll in NTTG by becoming a funder as specified in Section 13.3 below.

**13.2 Membership** Membership rights are specified in the committee charters. An entity may become a member of the following:

- a. Planning Committee as specified in the Planning Committee Charter,
- b. Cost Allocation Committee as specified in the Cost Allocation Committee Charter, and
- c. Steering Committee as specified in the Steering Committee Charter.

#### **13.3 Funder of NTTG**

##### **13.3.1 Eligibility**

An entity that meets the definition of “Nominal Funder” or “Full Funder” as defined in the currently effective Funding Agreement is eligible to join NTTG as a funder.

##### **13.3.2 Funding Enrollment Process**

An eligible entity will be enrolled in NTTG as a Full Funder on the date the requirements of (a), (b) and either (c) or (d) are satisfied. An eligible entity will be enrolled in NTTG as a Nominal Funder on the date the requirements of (a) and (b) are satisfied.

- a. Entity becomes a party to the currently effective Funding Agreement, and complies with the obligations necessary for the agreement to become effective.
- b. Entity becomes a party to the currently effective Finance Agent Agreement.
- c. If an entity intending to become a Full Funder is a public utility, the Commission accepts the filing of an Open Access Transmission Tariff by the entity with regional, interregional and interconnection-wide planning provisions of Attachment K that are the same as the other Full Funders for its transmission facilities located within the Western Interconnection.
- d. If an entity intending to become a Full Funder is not a public utility, then the entity shall adopt and post on its website an Open Access

Transmission Tariff or other agreement(s) providing for comparable transmission service, each including regional, interregional and interconnection-wide planning provisions for its transmission facilities located within the Western Interconnection that are the same as those expressed in Attachment K of the other Full Funders that are public utilities for their transmission facilities located in the Western Interconnection (each referred to as a “**NJ Attachment K**”).

### 13.3.3 Funder Enrollment Obligations

Upon enrollment and to maintain enrollment in good standing an entity enrolled as a Nominal Funder agrees to the requirements of (a), (b), and (c); an entity enrolled as a Full Funder agrees to the requirements of (a), (b), and (d); and if a non-public utility, the entity agrees to the requirements of (a), (b), and (e).

- a. Agree to be bound by the decisions that have been made by the Steering Committee, the Planning Committee, the Cost Allocation Committee, and such other committees as exist, up to and including the date of enrollment;
- b. Agrees to resolve disputes according to the dispute resolution process set forth in Attachment K, from the date of enrollment and throughout the period of enrollment.
- c. Agrees not to take action within the Steering Committee or other committees of NTTG, or fail to take action within the Steering Committee or other committees of NTTG, that prevents a Full Funder that is a public utility from complying with its Open Access Transmission Tariff including Attachment K, Funding Agreement, and Finance Agent Agreement.
- d. A Full Funder that is a public utility agrees:
  - i. To implement the provisions of its Open Access Transmission Tariff providing for comparable transmission service including Attachment K; and
  - ii. To modify its Open Access Transmission Tariff, Funding Agreement, and Finance Agent Agreement consistent with FERC orders.
- e. A Full Funder that is not a public utility agrees:
  - i. To implement the provisions of its NJ Attachment K;
  - ii. To modify its NJ Attachment K, Funding Agreement, and Finance Agent Agreement, consistent with FERC orders, except that a non-public utility Full Funder

need not file its NJ Attachment K, Funding Agreement, and Finance Agent Agreement;

- iii. Not to take action within the Steering Committee or other committees of NTTG, or fail to take action within the Steering Committee or other committees of NTTG, that prevents a Full Funder that is a public utility from complying with its Open Access Transmission Tariff including Attachment K, Funding Agreement, and Finance Agent Agreement; and
- iv. Not to include a provision in its NJ Attachment K that conflicts with a provision in the Open Access Transmission Tariff including Attachment Ks of a Full Funder that is a public utility.

#### 13.3.4 Funder Termination of Enrollment

An entity ceases being enrolled in NTTG as a funder on the date the Steering Committee determines that the entity satisfied the requirements of (a) and (b) below. Promptly following such date such entity, if a non-public utility, shall satisfy requirement (c), and if a public utility, shall satisfy requirement (d).

- a. The entity is no longer a party to the Funding Agreement or Finance Agent Agreement.
- b. The entity violates an applicable requirement set forth in Section 13.3.3.
- c. A non-public utility shall revoke and remove from its website the NJ Attachment K.
- d. A public utility shall file with the Commission an Attachment K in place of the Attachment K specified in Section 13.3.2.

#### 13.3.5 Identification of Full Funders

The following entities are enrolled in NTTG as Full Funders:

- a. Deseret Generation & Transmission Co-operative, Inc.,
- b. Idaho Power Company,
- c. NorthWestern Corporation,
- d. PacifiCorp,
- e. Portland General Electric Company, and

f. MATL LLP.

#### 13.3.6 Identification of Nominal Funders

Utah Associated Municipal Power Systems is enrolled in NTTG as a Nominal Funder.

### **14 STAKEHOLDER PARTICIPATION**

**14.1 Participation Through Public Meetings** Any stakeholder may participate in Steering Committee, Planning Committee and Cost Allocation Committee stakeholder meetings. The date, time, and location of the public meetings and meeting materials shall be posted on the NTTG Website as specified in the Steering Committee Charter, Planning Committee Charter, and the Cost Allocation Committee Charter. Meetings may be held in person, telephonically, or by video or Internet conference.

**14.2 Participation Through Committees** Any stakeholder may participate in Steering Committee, Planning Committee and Cost Allocation Committee meetings according to the terms and conditions of the Steering Committee, Planning Committee Charter, and the Cost Allocation Committee Charter, respectively. The date, time, and location of the public committee meetings shall be posted on the NTTG Website not less than seven (7) days prior to each meeting, in addition to posting the meeting materials prior to the meeting, as specified in the Steering Committee Charter, Planning Committee Charter, and the Cost Allocation Committee Charter.

**14.3 Participation Through Commenting** In addition to commenting orally during stakeholder meetings as set forth in Section 14.1 or during committee meetings as set forth in Section 14.2, any stakeholder may submit written comments to a committee chair at any time through [info@nttg.biz](mailto:info@nttg.biz).

### **15 SENSITIVE INFORMATION**

**15.1 Critical Energy Infrastructure Information (“CEII”)** Any participant in an NTTG process must adhere to the Commission’s rules and/or guidelines concerning CEII. Additional information concerning CEII, including a summary list of the data that is determined by the supplying party to be deemed CEII, shall be posted on the Transmission Provider’s OASIS, and updated regularly.

**15.2 Confidential Information** In the event a participant in an NTTG process claims that information is confidential, another participant seeking access to such information must agree to adhere to the terms of the Confidentiality Agreement. The form of Transmission Provider’s Confidentiality Agreement shall be posted on the Transmission Provider’s OASIS. Confidential information shall be disclosed in compliance with the Standards of Conduct, and provided only to those participants that require such information and execute the Confidentiality Agreement; provided, however, any such information may be supplied to (i) federal, state or local regulatory authorities that request such information and protect such information subject to non-disclosure regulations, or (ii) upon order of a court of competent jurisdiction.

## **16**     **TRANSMISSION PROVIDER PARTICIPATION**

**16.1 Planning & Process** Transmission Provider shall engage in regional transmission planning (including interregional coordination and interregional cost allocation) through NTTG. Transmission Provider shall support NTTG's planning and cost allocation processes through funding a share of NTTG as a Full Funder, and providing employee support of NTTG's planning, cost allocation, and administrative efforts.

**16.2 Project Identification** Transmission Provider will use best efforts to facilitate NTTG conducting its regional planning process, using identified regional transmission service needs and transmission and non-transmission alternatives, to identify regional and interregional transmission projects (if any) that are more efficient or cost effective from a regional perspective than the transmission projects identified in the Local Transmission Plans developed by the participating transmission providers that are Full Funders.

**16.3 Project Cost Allocation** Transmission Provider, through its participation in NTTG, will support and use best efforts to ensure that NTTG, as part of its regional planning process, will determine benefits of projects and thereby allocate costs of projects (or in the case of interregional projects, portions of projects) selected for cost allocation as more fully described in Section 19 of Part B.

**16.4 Information Provided** Transmission Provider will provide NTTG with:

- a. Its Local Transmission Plan;
- b. Data used to develop its Local Transmission Plan including projections of network customer loads and resources, projected point-to-point transmission service forecast information, existing and planned demand response resources, and stakeholder data described in Parts A and B.
- c. Updates to information about new or changed circumstances or data contained in the Local Transmission Plan;
- d. Public Policy Requirements;
- e. Public Policy Considerations; and
- f. Any other project proposed for the Regional Transmission Plan.

**16.5 Information Posted** Subject to appropriate Critical Energy Infrastructure Information or other applicable regulatory restrictions, Transmission Provider will post on its OASIS:

- a. The Biennial Study Plan;
- b. Updates to the Biennial Study Plan (if any);

- c. The Regional Transmission Plan; and
- d. The start and end dates of the current Regional Planning Cycle, along with notices for each upcoming regional planning meeting that is open to all parties.

## **17 DISPUTE RESOLUTION**

**17.1 Scope** Transmission Provider, signatories to the Planning Committee Membership Agreement, and Eligible Customers and stakeholders that participate in the regional planning process shall utilize the dispute resolution process set forth in this Section 17 to resolve procedural and substantive disputes related to the regional planning process.

**17.2 Process** Disputes shall be resolved according to the following process:

- a. Step 1 – In the event of a dispute involving the Planning Committee or Cost Allocation Committee (for disputes involving the Steering Committee, proceed to Step 2), the disputing entity shall provide written notice of the dispute to the applicable Planning Committee or Cost Allocation Committee chair. An executive representative from the disputing entity shall participate in good faith negotiations with the Planning Committee or Cost Allocation Committee to resolve the dispute. In the event the dispute is not resolved to the satisfaction of the disputing entity within 30 days of written notice of dispute to the applicable Planning or Cost Allocation Committee chair, or such other period as may be mutually agreed upon, the disputing entity shall proceed to Step 2.
- b. Step 2 – The Planning Committee or Cost Allocation Committee chair shall refer the dispute to the Steering Committee. In the event of a dispute involving the Steering Committee, the disputing entity shall provide written notice of the dispute to the Steering Committee chair. An executive representative from the disputing entity shall participate in good faith negotiations with the Steering Committee to resolve the dispute. Upon declaration of an impasse by the state co-chair of the Steering Committee, the disputing entity shall proceed to Step 3.
- c. Step 3 – If the dispute is one that is within the scope of the WECC dispute resolution procedures (including a dispute that may be accommodated through modification of the WECC dispute resolution procedures through invocation of Section C.4 thereof), the disputing entity shall follow the mediation process defined in Appendix C of the WECC bylaws. If the dispute is not one that is within the scope of the WECC dispute resolution procedures or the WECC otherwise refuses to accept mediation of the dispute, the disputing entity may utilize the Commission’s dispute resolution service to facilitate mediation of the dispute. If the dispute cannot be resolved in Step 3, the disputing entity shall proceed to Step 4.

- d. Step 4 – If the dispute is one that is within the scope of the WECC dispute resolution procedures (including a dispute that may be accommodated through modification of the WECC dispute resolution procedures through invocation of Section C.4 thereof), the disputing entity shall follow the binding arbitration process defined in Appendix C of the WECC bylaws. If the dispute is not one that is within the scope of the WECC dispute resolution procedures or the WECC otherwise refuses to accept arbitration of the dispute, the disputing entity may invoke the arbitration procedures set out in Article 12 of the *pro forma* Open Access Transmission Tariff to resolve the dispute.

**17.3 Timeliness** To facilitate the completion of the Regional Transmission Plan, disputes over any matter shall be raised timely; provided, however, in no case shall a dispute under this Section 17 be raised more than 30 days after a decision is made in the study process or the posting of a milestone document, whichever is earlier. Nothing contained in this Section 17 shall restrict the rights of any entity to file a complaint with the Commission under relevant provisions of the Federal Power Act.

## **Planning and Cost Allocation Processes**

### **18 PREPARATION OF REGIONAL TRANSMISSION PLAN**

The Planning Committee will biennially prepare a long-term (10-year) bulk transmission expansion plan (the “**Regional Transmission Plan**”). The regional transmission planning process is comprised of the activities set forth in this Section during the Regional Planning Cycle.

#### **18.1 Pre-qualify for Cost Allocation**

##### 18.1.1 Who must Pre-Qualify

A Nonincumbent Transmission Developer and an Incumbent Transmission Developer (a “**Project Sponsor**”) that intends to submit its project for cost allocation consideration, if the project is selected in the Regional Transmission Plan for cost allocation, must be pre-qualified by the Planning Committee and Cost Allocation Committee in accordance with this Section 18.1. A Project Sponsor must requalify to be considered a qualified Project Sponsor during the next Regional Planning Cycle.

##### 18.1.2 How to Pre-Qualify

A Project Sponsor must submit the sponsor qualification data described in Table 1 below to NTTG, through [info@nttg.biz](mailto:info@nttg.biz), by October 31<sup>st</sup> of Quarter 8 of the prior Regional Planning Cycle. A Project Sponsor shall use the Sponsor Qualification Data Form found on the NTTG Website to submit the data.

The Planning Committee and Cost Allocation Committee will apply the sponsor qualification criteria as summarized in Table 1 below in a comparable and non-discriminatory manner to both incumbent and non-incumbent transmission

developers. The sufficiency of the qualification data will be determined by the Planning Committee and Cost Allocation Committee, in consultation with stakeholders, at regularly scheduled meetings in November of Quarter 8 of the prior Regional Planning Cycle.

The Planning Committee Chair and the Cost Allocation Committee Chair will jointly provide the Project Sponsor with notice of the committees' determinations within five business days following the date a determination has been made by both committees. The notice will provide either that the Project Sponsor satisfied the qualification data requirements, or will identify specific deficiencies.

The Project Sponsor has until March 31<sup>st</sup> of Quarter 1 of the current Regional Planning Cycle to cure identified deficiencies. If the deficiency is not cured by the end of March of Quarter 1, the project will be considered an unsponsored project submitted by a stakeholder, unless the Applicant withdraws the project from further consideration. The Planning Committee may consider the incomplete data in its consideration of whether to include an unsponsored project that resembles a project set forth in a withdrawn submission. During the next Regional Planning Cycle, stakeholder may seek qualification as a Project Sponsor, with updated information and data deficiencies cured.



<b>Table 1. Sponsor Qualification Data – Submit Quarter 8 Prior to the Regional Planning Cycle<sup>2</sup></b>			
	<b>Category</b>	<b>Qualification Data</b>	<b>How Sponsor Qualification Data Will be Evaluated</b>
1	Project Sponsor description	<ol style="list-style-type: none"> <li>1. Name and address.</li> <li>2. Years in business.</li> <li>3. Operating environment (nature of business).</li> </ol>	Assess whether the required data was submitted.
2	Project summary	<ol style="list-style-type: none"> <li>1. Voltage.</li> <li>2. Single or double circuit.</li> <li>3. AC or DC.</li> <li>4. Estimated cost.</li> <li>5. Approximate construction period,</li> <li>6. Project location.</li> <li>7. Points of interconnection with the transmission grid.</li> </ol>	Assess whether the required data was submitted.
3	Project Name	<ol style="list-style-type: none"> <li>1. Project Name.</li> </ol>	Assess whether the required data was submitted.
4	Project Sponsor demonstration of technical expertise to develop, construct and own the proposed project	<ol style="list-style-type: none"> <li>1. Management’s experience in developing, constructing (or managing construction), and owning a project of similar size and scope.</li> <li>2. Clear discussion of Project Sponsor’s depth and breadth of technical expertise, including Project Sponsor’s internal expertise or external expertise, or both, to develop, construct, and own the proposed project.</li> <li>3. Name, location, and description of a project of similar scale that</li> </ol>	Assess whether the submission provides experience, including managerial and technical expertise in developing, constructing (or managing construction) and owning comparable projects.

<sup>2</sup> All information supplied to the Planning Committee or subcommittees must be marked by the provider in accordance with the appropriate document class and is treated appropriately by all committee and subcommittee members. The markings should be as follows:

a) Public.

b) Contains Critical Energy Infrastructure Information - Do Not Release. (<http://www.ferc.gov/legal/ceii-foia/ceii/classes.asp>)

c) Contains Privileged Information - Do Not Release.

**Table 1. Sponsor Qualification Data – Submit Quarter 8 Prior to the Regional Planning Cycle2**

	<b>Category</b>	<b>Qualification Data</b>	<b>How Sponsor Qualification Data Will be Evaluated</b>
		demonstrates Project Sponsor’s technical expertise to develop, construct, and own the proposed project.	
5	Project Sponsor financial expertise to develop, construct, and own the proposed project	<p>Creditworthiness review requires the following information, if available:</p> <ol style="list-style-type: none"> <li>1. Most recent annual report.</li> <li>2. Most recent quarterly report.</li> <li>3. Last two most recent audited year-end financial statements.</li> <li>4. Rating agency reports.</li> <li>5. Any material issues that could affect the credit decision, including but not limited to litigation, arbitration, contingencies, or investigations (if applicable).</li> <li>6. Other information supporting Project Sponsor’s financial expertise.</li> </ol> <p>In addition to the qualification data above, demonstrate that the Project Sponsor, or the sponsor’s parent company has either an investment grade rating, or, meets the following test:</p> <p>A. Has a minimum tangible net worth of \$1,000,000 or total asset of \$10,000,000.</p>	Assess whether the qualification data was submitted and satisfied the required qualitative criteria.
6	Proposed project financing plan	<ol style="list-style-type: none"> <li>1. Describe how the project will be financed.</li> <li>2. List investors and percentage ownership of each.</li> <li>3. Proposed sources of debt and equity capital and the percentages of each.</li> </ol>	Assess whether the submission provides the appropriate financial information for the investor(s), including financial expertise provided in response to category 4.
7	Project Sponsor ability to	Clear description of Project Sponsor, its parent organization, or the third-	Assess whether the qualification data was submitted and satisfied the

<b>Table 1. Sponsor Qualification Data – Submit Quarter 8 Prior to the Regional Planning Cycle2</b>			
	<b>Category</b>	<b>Qualification Data</b>	<b>How Sponsor Qualification Data Will be Evaluated</b>
	maintain and operate proposed project	party contractor(s) the Project Sponsor plans to retain to operate and/or maintain the proposed project. To the extent the Project Sponsor plans to rely on any third-party contractor(s) not yet under contract, the Project Sponsor must also indicate when it plans to enter into a definitive agreement with its contractor(s). Must provide (1) actual examples of at least five years of operation and maintenance experience for a similar size project; or (2) provide similar information for Project Sponsor’s consultant or outsourced entity.	required qualitative criteria.
8.	Primary Project Contact	1. Name. 2. Title. 3. Phone. 4. Email.	Assess whether the required data was submitted.
9.	Signature	Signature of authorized representative	Assess whether the document was signed.

**18.2 Quarter 1 – Data Gathering and Project Submittal**

18.2.1 Data Gathering

Planning Committee shall gather and coordinate Transmission Provider (as specified in Section 3.2.8 and Section 16.4) and stakeholder input, which may include ideas for consideration, applicable to the planning horizon. Any stakeholder may submit data to be evaluated as part of the preparation of the Draft Regional Transmission Plan, including data supporting transmission needs and associated facilities driven by Public Policy Requirements, Public Policy Considerations, and alternate solutions to the identified needs set out in the Transmission Provider’s Local Transmission Plan and prior Regional Transmission Plan. A stakeholder shall use the Data Submittal Form found on the NTTG Website to submit its data. Any stakeholders wishing to submit input without submitting a Data Submittal Form can submit such input by email. Stakeholders shall submit

such data and/or input by email to NTTG through, [info@nttg.biz](mailto:info@nttg.biz), no later than March 31<sup>st</sup> of Quarter 1.

### 18.2.2 Proposing a Project for Consideration

A Project Sponsor (refer to footnote 1 of Table 2) may propose a transmission project for consideration in the Regional Transmission Plan (a “**Sponsored Project**”) by submitting to the Planning Committee chair the information identified in the “sponsored project” column of Table 2 below. A stakeholder may submit an unsponsored project for consideration in the Regional Transmission Plan by submitting to the Planning Committee chair via [info@nttg.biz](mailto:info@nttg.biz) the information identified in the “unsponsored project” column of Table 2 below. A Merchant Transmission Developer within the NTTG Footprint shall submit to the Planning Committee chair via [info@nttg.biz](mailto:info@nttg.biz) the information identified in the “merchant developer project” column of Table 2 below. A Project Sponsor and a stakeholder that submits an unsponsored project are collectively referred to in this Section 18 as an “**Applicant.**” Applicant and a Merchant Transmission Developer shall use the Data Submittal Form found on the NTTG Website to submit its project. By March 31<sup>st</sup> of Quarter 1, Applicant and Merchant Transmission Developer shall submit a completed Data Submittal Form to NTTG, through [info@nttg.biz](mailto:info@nttg.biz).

<b>Table 2: Minimum Information Required (Yes required or No not required)</b>				
		Sponsored Project	Unsponsored Project	Merchant Developer Project
A	Load and resource data (1)	Y	Y	N (2)
B	Forecasted transmission service requirements, if any (5)	Y	Y	N (3)
C	Whether the proposed project meets reliability or load service needs	Y	Y	N (3)
D	Economic considerations (6)	Y	Y	N (4)
E	Whether the proposed project satisfies a transmission need driven by Public Policy Requirements	Y	Y	N (3)
F	Project location	Y	Y	Y
G	Voltage level (including whether AC or DC)	Y	Y	Y
H	Structure type	Y	Y	Y
I	Conductor type and configuration	Y	Y	Y
J	Project terminal facilities	Y	Y	Y

K	Project cost, associated annual revenue requirements, and underlying assumptions and parameters in developing revenue requirement	Y	Y	N
L	Project development schedule	Y	Y	Y
M	Current project development phase	Y	Y	Y
N	In-service date	Y	Y	Y
O	A list of all planning regions to which an interregional project has been submitted for evaluation	Y	Y	N
<ol style="list-style-type: none"> <li>1. Incumbent Transmission Developer shall provide load and resource data for its balancing authority area or the balancing authority area in which it operates. Nonincumbent Transmission Developer and Merchant Transmission Developer who are providing data shall identify the load intended to be served with the line and the generation resource intended to inject energy into the line for the identified load.</li> <li>2. To the extent applicable and data is readily available for the proposed transmission project; provide the approximate location of the new or existing resource and/or load that may require this proposed project if other than forecasted transmission service.</li> <li>3. Provide this information only to the extent it is readily available when the information is due.</li> <li>4. To the extent applicable and data is readily available for the proposed transmission project; provide that approximate location of the congestion that this project is proposed to address.</li> <li>5. Provide data for transmission service requests and forecasted transmission service needs. If network transmission loads or native load service needs are included in the response to the load data requested in row "A," then do not provide them in response to this data request. If not provide, then provide the data.</li> <li>6. Provide data supporting the economic considerations (rather than load service, reliability or Public Policy Requirements) that are driving the project. Economic considerations include but are not limited to a search for lower cost power or marketing opportunities for power or transmission service.</li> </ol>				

### 18.2.3 Proposing a Project for Consideration for Cost Allocation

In addition to the information specified in Section 18.2.2 above, an Applicant shall use the Cost Allocation Data Form found on the NTTG Website to propose its project for cost allocation and submit the additional information requested below. By March 31<sup>st</sup> of Quarter 1, Applicant shall submit a completed form to NTTG, through [info@nttg.biz](mailto:info@nttg.biz). Such Applicants are encouraged but not required to also provide following information:

- a. A statement as to whether the project was selected in a transmission provider's local plan;
- b. A statement as to whether the proposed project is planned in conjunction with evaluation of economical resource development and operation (i.e., as part on an integrated resource planning process or other resource planning process regarding economical operation of

current or future resources) conducted by or for one or more load serving entities within the footprint of a transmission provider;

- c. If the proposed project is planned primarily to meet the transmission needs of a reliability or Public Policy Requirement of a transmission provider, copies of all studies (i.e., engineering, financial, and economic) upon which planning of the project is based;
- d. If the proposed project is planned as part of future resource development and operation within the footprint of a local transmission provider, copies of all studies upon which planning of the project is based, including, but not limited to, any production cost model input and output used as part of the economic justification of the project;
- e. To the extent not already provided, copies of all studies performed by or in possession of the Applicant that describe and/or quantify the estimated annual impacts (both beneficial and detrimental) of the proposed project on the Applicant and other regional entities;
- f. To the extent not already provided, copies of any WECC or other regional, interregional, or interconnection-wide planning entity determinations relative to the project;
- g. To the extent not set forth in the material provided in response to items (b) – (e), the input assumptions and the range of forecasts incorporated in any studies relied on by the Applicant in evaluating the efficiency or cost-effectiveness of the proposed project; and
- h. Any proposal Applicant may choose to offer with regard to treatment of project cost overruns.

#### 18.2.4 Submission of Economic Study Requests

Stakeholders may submit Economic Study Requests as set forth in Section 22.

#### 18.2.5 Updates to Previously Selected Projects

For projects selected in the prior Regional Transmission Plan, the Applicant must submit an updated project development schedule to the Planning Committee. The Applicant must also submit updated information for its third-party contractor(s), to the extent such information or the timeline for entering into a definitive agreement is different than the information previously provided pursuant to Table 1 above. Applicants shall use the Data Submittal Form found on the NTTG Website. By March 31<sup>st</sup> of Quarter 1, Applicants shall submit an updated form to NTTG, through [info@nttg.biz](mailto:info@nttg.biz).

#### 18.2.6 Review for Completeness

The Planning Committee will review the information submitted pursuant to this Section 18.2 for completeness. If an Applicant fails to meet the information requirements set forth above, the Planning Committee shall notify the Applicant of the reasons for such failure. The Planning Committee will attempt to remedy deficiencies in the submitted information through informal communications with the Applicant. If such efforts are unsuccessful by April 15<sup>th</sup> of Quarter 2, the Planning Committee shall return the Applicant's information, and Applicant's request shall be deemed withdrawn. The Planning Committee may consider the incomplete data in its consideration of whether to include an unsponsored project that resembles a project set forth in a withdrawn submission. During the next Regional Planning Cycle, Applicant may resubmit the project, with updated information and data deficiencies cured, for consideration in the Regional Transmission Plan and may request cost allocation consideration. Figure 1. "Project Submittal Process" below, summarizes the process described in this Section 18.2 for submitting a project to be considered in the development of the Draft Regional Transmission Plan.

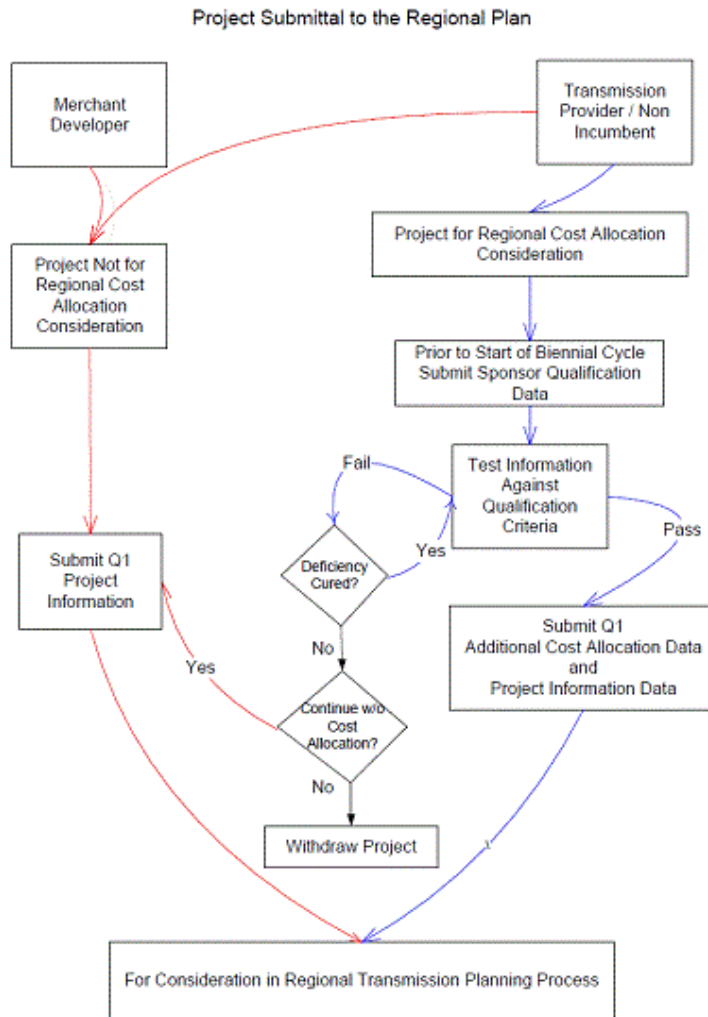


Figure 1. “Project Submittal Process”

### **18.3 Quarter 2 – Development of the Biennial Study Plan**

#### **18.3.1 Evaluate the Data**

The Planning Committee shall identify the loads, resources, point-to-point transmission requests, desired flows, constraints, and other technical data needed to be included and met by the development of the Regional Transmission Plan. The Planning Committee shall evaluate all stakeholder submissions, in consultation with stakeholders, on a basis comparable to data and submissions required for planning the transmission system for both retail and wholesale customers. The Planning Committee shall evaluate solutions based on a comparison of their ability to meet reliability requirements, address economic considerations, and meet transmission needs driven by Public Policy Requirements.

#### **18.3.2 Development of the Biennial Study Plan**

The Planning Committee will develop the Biennial Study Plan, which describes:

- a. The detailed study methodology;
- b. Reliability criteria;
- c. Transmission needs driven by Public Policy Requirements and Public Policy Considerations selected for use in the Biennial Study Plan;
- d. Assumptions;
- e. Databases;
- f. Analysis tools;
- g. Projects (including unsponsored projects) included in the prior Regional Transmission Plan that will be reevaluated according to Section 20 (unless the Planning Committee has received notice or is aware that a project included in the prior Regional Transmission Plan has been cancelled or replaced in which case the cancelled or replaced project will not be included);
- h. The projects included in each of the Full Funders Local Transmission Plans;
- i. Sponsored Projects, projects submitted by stakeholders, projects submitted by Merchant Transmission Developers, unsponsored projects identified by the Planning Committee, and unsponsored projects submitted by stakeholders; and



j. Cost allocation scenarios.

The projects identified in (g) and (h) are collectively referred to as the IRTP. The projects identified in (i) are referred to as the “**Alternative Projects.**” The cost allocation scenarios referenced in (j) are developed by the Cost Allocation Committee (in consultation with the Planning Committee) with stakeholder input, for those parameters that will likely affect the amount of total benefits and their distribution among Beneficiaries as set forth in Section 19.2.3.

When developing the draft Biennial Study Plan, the Planning Committee will, under certain circumstances described in Section 20 below, identify projects selected in the prior Regional Transmission Plan that will be reevaluated and potentially replaced or deferred.

At a Quarter 2 public meeting, the Planning Committee and the Cost Allocation Committee will present the draft Biennial Study Plan to stakeholders for comment. The Planning Committee will recommend the draft Biennial Study Plan to the Steering Committee for approval.

After considering the draft Biennial Study Plan, the Steering Committee may remand it to the Planning Committee for any of the following reasons:

- (aa) the draft Biennial Study Plan lacks details;
- (bb) the draft Biennial Study Plan relies on inappropriate data, metrics, or scenarios; or
- (cc) the draft Biennial Study Plan is inconsistent with the obligations contained in this Attachment K or the charters attached hereto.

Further, the Steering Committee may also remand the draft Biennial Study Plan to the Cost Allocation Committee on any of the following additional grounds:

- (dd) the Steering Committee objects to the parameters used to define which Beneficiaries are eligible for allocating costs, or
- (ee) the Steering Committee objects to the assumptions or methods used in modeling benefits for the various study scenarios.

In the event of a remand, the Steering Committee shall provide a specific description of the shortcomings, omissions, or inconsistencies that it found. The Planning Committee or Cost Allocation Committee, whichever is appropriate, shall augment or modify the draft Biennial Study Plan to correct the deficiencies identified by the Steering Committee and the Planning Committee shall resubmit the draft Biennial Study Plan, until the Steering Committee is satisfied.

18.3.3 Selection of transmission needs driven by Public Policy Requirements and Public Policy Considerations Used in the Biennial Study Plan

18.3.3.1 Overview

NTTG’s regional planning process, through the Planning Committee, receives transmission needs driven by Public Policy Requirements, Public Policy Considerations, and data from the local transmission plans and stakeholders during the Quarter 1 data gathering submittal period pursuant to Section 18.2.1. NTTG’s Regional Transmission Plan only includes consideration of transmission needs driven by Public Policy Requirements. Public Policy Considerations as agreed upon by the Planning Committee, with stakeholder input, during Quarter 2 Biennial Study Plan development, will be evaluated as to whether they create additional transmission needs. Together, these transmission needs driven by Public Policy Requirements and Public Policy Considerations are approved by the Steering Committee as part of the Biennial Study Plan approval process at the end of Quarter 2.

18.3.3.2 Process

The Planning Committee applies the following process, shown in Figure 2. “Planning Committee Process for Selecting Public Policy Requirements and Public Policy Considerations,” and described below (in the event of conflict between the figure and the text, the text controls) to transmission needs driven by Public Policy Requirements and Public Policy Considerations data.

<b>Q1 Transmission Needs Driven by Public Policy Data Submitted</b>	
Transmission Provider	Stakeholder
<b>Q2 Develop Biennial Study Plan Define Transmission Needs Driven by Public Policy Requirements &amp; Public Policy Considerations</b>	
With stakeholder and state regulator input, identify transmission needs driven by Public Policy Requirements and Public Policy Considerations to include in Regional Transmission Plan	
Requirement included in Regional Transmission Plan	Considerations included in scenario analysis
<b>Q2 (June)</b>	

Rationale for selection and exclusion of transmission needs driven by Public Policy Requirements and Public Policy Considerations posted on NTTG Website
<b>Q3 Start Technical Analysis</b>
Transmission needs driven by Public Policy Requirements to be evaluated with other projects within biennial planning process

Figure 2. “Planning Committee Process for Selecting Public Policy Requirements and Public Policy Considerations”

In Quarter 1, transmission needs and associated facilities driven by Public Policy Requirements and Public Policy Considerations are received from the transmission providers’ local transmission plans and received from stakeholders using NTTG’s data submittal forms. Refer to Section 18.2.1.

In Quarter 2, after consultation with stakeholders, including state regulators, the Planning Committee recommends to the Steering Committee the transmission needs driven by Public Policy Requirements to be used in the Biennial Study Plan, as well as the transmission needs driven by Public Policy Considerations to be used in the additional study analysis. The additional study analysis results are informational only and may inform the Regional Transmission Plan, but will not result in the inclusion of additional projects in the Regional Transmission Plan. Refer to Section 18.3.2.

In June of Quarter 2, the Steering Committee approves the Biennial Study Plan, including the transmission needs driven by Public Policy Requirements for the Regional Transmission Plan and transmission needs driven by Public Policy Considerations for additional study analysis. Refer to Section 18.3.2.

#### 18.3.3.3 Identification

During the Regional Planning Cycle, the Planning Committee determines if there is a more efficient or cost-effective regional solution to meet the transmission needs driven by Public Policy Requirements set forth in the Biennial Study Plan. The selection process and criteria for regional projects meeting transmission needs driven by Public Policy Requirements are the same as those used for any other regional project chosen for the Regional Transmission Plan. Rather than considering transmission needs driven by Public Policy Requirements separately from other transmission needs, the Planning Committee evaluates them in its technical analysis along with other regional projects.

#### 18.3.3.4 Posting

After the Steering Committee approves the Public Policy Requirements and the Public Policy Considerations, the Planning Committee will post on the NTTG

Website, which transmission needs driven by Public Policy Requirements and Public Policy Considerations will and will not be evaluated in the Regional Planning Cycle, along with an explanation of why particular transmission needs driven by Public Policy Requirements and Public Policy Considerations were or were not considered.

#### 18.3.3.5 Identification of Un-sponsored Transmission Projects by Planning Committee

The Planning Committee may, using its knowledge of the transmission systems and its professional judgment, identify an un-sponsored project.

### **18.4 Quarters 3 and 4 – Preparation of the Draft Regional Transmission Plan**

#### 18.4.1 Analysis and Methodology

The Planning Committee shall utilize each Alternative Project in one or more Change Cases and, using the criteria set forth in Section 18.4.2, determine if a Change Case is a more efficient or cost-effective solution for the NTTG Footprint than the IRTP based upon the methodology set forth below. The methodology employed by the Planning Committee will be to develop one or more Change Cases by replacing non-Committed project(s) in the IRTP with one or more of the Alternative Projects. Each Change Case will be compared against the IRTP for the tenth year of a ten-year planning horizon counted from the first year of the Regional Planning Cycle. Criteria (b) and (c) described in Section 18.4.2 below will be monetized using an index price of power and summed with capital-related cost criteria to develop an incremental cost for that Change Case that will be compared to the IRTP's incremental capital-related cost for replaced or deferred project(s) and incremental Monetized Non-Financial Costs. The set of projects (either the IRTP or a Change Case) with the lowest incremental cost, as adjusted by its effects on neighboring regions as set forth in Section 18.4.4, will then be incorporated within the Draft Regional Transmission Plan. When making such a decision the Planning Committee may utilize the cost allocation scenarios developed in Section 19.2.3 to test the robustness of projects considered for the Draft Regional Transmission Plan. If there are projects eligible for cost allocation (i.e., those satisfying the criteria set forth in Sections 19 and 19.2.1) that are incorporated within the Draft Regional Transmission Plan those projects will then be evaluated for cost allocation by the Cost Allocation Committee as set forth in Section 19.2. As used in this paragraph, "Monetized Non-Financial Incremental Costs" means those incremental costs associated with an Alternative Project that are not directly evaluated and measured in dollars of changed revenues, expenses, or capital investment. Such incremental costs, which are non-financial in nature, will be monetized by applying an appropriate index or conversion factor to convert the units in which the incremental costs were directly evaluated and measured into a dollar value. (For example, losses are measured in megawatt hours. That quantity will be converted to dollars by multiplying the quantity by a dollar per megawatt hour index.)

## 18.4.2 Analysis Criteria

Criterion (a), (b), and (c) below will be used to determine if a Change Case is a more efficient or cost-effective solution for the NTTG Footprint than the IRTP based upon the methodology set forth in Section 18.4.1:

- a. Capital-Related Costs. A change in Annual Capital-Related Costs between a Change Case and the IRTP captures benefits related to transmission needs driven by both reliability and Public Policy Requirements. This benefit metric captures the extent that a project in the IRTP can be displaced (either deferred or replaced) while still meeting all regional transmission needs, including reliability standards (associated with serving existing, as well as new, service obligations) such that the Change Case has lower capital-related costs. The displacement of a project in the IRTP may be due to a Change Case or due to the determination that more than one project in the IRTP is meeting the same transmission need. This same benefit metric also captures the extent to which a Change Case may displace one or more projects in the IRTP for purposes of meeting Public Policy Requirements because it is determined to have lower capital-related costs, while still meeting the same Public Policy Requirements.

**“Annual Capital-Related Costs”** will be the sum of annual return (both debt and equity related), depreciation, taxes other than income, operation and maintenance expense, and income taxes. These costs will be based on estimates provided by the Applicant or estimates by the Planning Committee using representative industry data if not provided by the Applicant. Power flow analysis will be used to ensure each scenario meets transmission reliability standards.

Those entities affected by the change in Annual Capital-Related Costs shall be identified for use in the cost allocation process.

- b. Energy Losses. This metric captures the change in energy generated to serve a given amount of load. A change in annual energy losses between a Change Case and the IRTP measures the energy impact of changing (either displacing or adding) projects within the IRTP with one or more projects in the Change Case. Power flow or production cost analysis will be used to measure the quantity of energy losses in each scenario. Those entities affected by the change in energy losses shall be identified for the cost allocation process.
- c. Reserves. This metric is based on savings that may result when two or more balancing authority areas could economically share a reserve resource when unused transmission capacity remains in proposed transmission project. A change in annual reserves between a Change

Case and the IRTP measures the energy impact of changing projects within the IRTP with one or more projects in the Change Case. The incremental reserve requirement for each balancing authority area within the NTTG Footprint will be calculated as a standalone quantity and as a reserve sharing quantity for each scenario. Those entities affected by the change in reserves shall be identified for the cost allocation process.

Each criterion (a), (b), and (c) will be expressed as an annual change in costs (or revenue). The annual changes will be discounted to a net present value to the in-service year of the project for which the cost allocation is being determined. A common year will be selected for net present value calculations for all cases to enable a comparative analysis between each Change Case and the IRTP. For example, if a transmission project scheduled in-service beginning year 6 of the 10-year study period is deferred until after year 10 by another project in-service beginning in year 6, the change in Annual Capital-Related Costs would be computed for years 6 through 10 and converted to a net present value for year 6 of the study period. Any change in energy losses or reserves would similarly be calculated for years 6-10 as a change in cost or revenue for each affected Beneficiary and discounted to a net present value to year 6, the in-service year of the project for which the cost allocation is developed.

#### 18.4.3 Analysis of Additional Alternatives

The Planning Committee, as part of its analysis performed under Section 18.4.1, shall consider the Transmission Providers' and stakeholders' identified transmission needs vis-à-vis the projects identified in the Biennial Study Plan to determine whether there are other alternatives (including unsponsored projects) which may be more efficient or cost effective in meeting the region's transmission needs.

#### 18.4.4 Impacts on Neighboring Regions

The Planning Committee will monitor the impacts of projects under consideration for the Draft Regional Transmission Plan on neighboring Planning Regions. The methodology employed by the Planning Committee will identify the most efficient or cost effective plan (either the IRTP or a Change Case) prior to consideration of impacts on neighboring Planning Regions. If the Planning Committee finds that such Change Case or IRTP may cause reliability standard violations on neighboring Planning Regions, the Planning Committee shall coordinate with the neighboring Planning Regions to reassess and redesign the facilities. If the violation of reliability standards can be mitigated through new or redesigned facilities or facility upgrades within the NTTG Footprint or through operational adjustments within the NTTG Footprint, the costs of such mitigation solutions shall be considered in addition to the cost of the project(s) under consideration when selecting a project for the Draft Regional Transmission Plan. If the reliability standard violation cannot be mitigated (by actions within the NTTG Footprint or the affected neighboring Planning Region), the Change Case or IRTP will not be selected for the Draft Regional Transmission Plan. The impacts of upgrades on, or additions to, the

neighboring Planning Regions, whether identified by Planning Committee or the neighboring Planning Regions, will be considered by the Planning Committee; provided, however, any costs associated with such impacts in the neighboring Planning Regions will not be accepted for cost allocation, and will not be considered when selecting a project for the Draft Regional Transmission Plan. The evaluation specified in this Section 18.4.4 will be repeated, as necessary, until the Change Case or IRTP is selected for the Draft Regional Transmission Plan pursuant to Section 18.4.1.

#### 18.4.5 Draft Regional Transmission Plan

The Planning Committee shall produce a Draft Regional Transmission Plan by the end of Quarter 4. The projects selected into the Draft Regional Transmission Plan are determined according to Section 18.4.1, and the projects selected into the Draft Regional Transmission Plan for cost allocation are determined according to Section 19.2.1.

### **18.5 Quarter 5 – Stakeholder Review of Draft Regional Transmission Plan**

#### 18.5.1 Public Review

The Planning Committee will facilitate stakeholder review and comment on the Draft Regional Transmission Plan, including assessment of the benefits accruing from transmission facilities planned according to the transmission planning process.

#### 18.5.2 Public Comment and Updates

Any stakeholder may submit to the Planning Committee chair comments on the Draft Regional Transmission Plan, through [info@nttg.biz](mailto:info@nttg.biz). Stakeholder comments may include identification of a new unsponsored project. New unsponsored projects will be considered to the extent feasible, as determined by the Planning Committee, without delaying the development of the Regional Transmission Plan. New unsponsored projects that are not considered during the current Regional Planning Cycle will be noted in the Regional Transmission Plan and carried forward for consideration in the following Regional Planning Cycle. In addition, Project Sponsors and stakeholders that submitted projects included in the Draft Regional Transmission Plan shall update data provided in Quarter 1 using the same forms identified in Quarter 1; provided, however, only changes that should likely lead to a material change, individually or in the aggregate, in the Draft Regional Transmission Plan and match the level of detail described in Quarter 1 above need to be submitted. Changes to third-party contractor information or the timeline for entering into a definitive agreement with a third-party contractor(s) is considered a material change and must be updated, to the extent the information is different than the information provided in Quarter 1. All stakeholder submissions will be evaluated, in consultation with stakeholders, on a basis comparable to data and submissions required for planning the transmission system for both retail and

wholesale customers, and solutions will be evaluated based on a comparison of their relative economics and ability to meet reliability requirements, address economic considerations and meet transmission needs driven by Public Policy Requirements.

#### 18.5.3 Submission of Economic Study Requests

Stakeholders may submit Economic Study Requests as provided for in Section 22.

### **18.6 Quarter 6 – Updates to the Biennial Study Plan**

#### 18.6.1 Updated Biennial Study Plan

The Biennial Study Plan will be updated based on the Planning Committee's review of stakeholder-submitted comments received during Quarter 5, additional information about new or changed circumstances relating to loads, resources, transmission projects or alternative solutions, or identified changes to data provided in Quarter 1.

#### 18.6.2 Cost Allocation

*The Cost Allocation Committee will begin allocating costs of projects selected into the Draft Regional Transmission Plan to Beneficiaries as described in Section 19.2.*

#### 18.6.3 Draft Final Regional Transmission Plan

The Planning Committee will produce by the end of Quarter 6, the Draft Final Regional Transmission Plan.

**18.7 Quarter 7 – Draft Final Regional Transmission Plan Review** The Planning Committee will facilitate a stakeholder process for review and comment on the Draft Final Regional Transmission Plan, including assessment of the benefits accruing from transmission facilities planned according to the transmission planning process. The Planning Committee will document and consider simultaneous feasibility of identified projects, cost allocation recommendations, and stakeholder comments. The Planning Committee will produce a revised Draft Final Regional Transmission Plan, if necessary, after considering stakeholder comments.

**18.8 Quarter 8 – Regional Transmission Plan Approval** The Planning Committee will submit the Draft Final Regional Transmission Plan to the Steering Committee for approval, completing the Regional Planning Cycle. The Planning Committee will share the approved Regional Transmission Plan for consideration in the local and interconnection-wide study processes.

Any unsponsored project in the Final Regional Transmission Plan may be resubmitted using, the process described in Sections 18.1 and 18.2 above, as a Sponsored Project by a pre-qualified Project Sponsor for consideration in the next Regional Planning Cycle for purposes of cost allocation. Pursuant to Section 20 below, such project shall be subject to reevaluation unless it is a Committed Project.



**18.9 Quarterly Meetings** The Planning Committee and Cost Allocation Committee shall jointly convene a public meeting at the end of each quarter in the Regional Study Cycle to present a status report on the development of the Regional Transmission Plan, summarize the substantive results at each quarter, present drafts of documents, and receive comments.

## **19 COST ALLOCATION**

A Project Sponsor intending to submit its Sponsored Project for cost allocation must satisfy the pre-qualification requirements set forth in Section 18.1, submit the Sponsored Project as set forth in Section 18.2.2, and request cost allocation as set forth in Section 18.2.3. An Applicant desiring for its project be considered for cost allocation as an unsponsored project must submit the unsponsored project as set forth in Section 18.2.2 and request cost allocation as set forth in Section 18.2.3. Transmission Provider may elect to allocate costs of its project through either participant funding as set forth in Section 19.1 or through NTTG's cost allocation process as set forth in Section 19.2 as either a Sponsored Project or unsponsored project, provided that Transmission Provider complies with the applicable requirements specified above.

### **19.1 Participant Funding**

#### **19.1.1 Open Season Solicitation of Interest**

Transmission Provider may elect at its discretion to provide an "open season" solicitation of interest to secure additional project participants for any project. Upon a determination to hold an open season solicitation of interest for a project, Transmission Provider will:

- a. Announce and solicit interest in the project through informational meetings, its website and/or other means of dissemination as appropriate;
- b. Schedule meeting(s) with stakeholders and/or state public utility commission staff, as appropriate; and
- c. Post information about the proposed project on its OASIS.

For any project entered into by Transmission Provider where an open-season solicitation-of-interest process has been used, the Transmission Provider will choose to allocate costs among project participants in proportion to investment or based on a commitment to transmission rights, unless the parties agree to an alternative mechanism for allocating project costs. In the event an open season process results in a single participant, the full cost and transmission rights will be allocated to that participant.

#### **19.1.2 Projects without a Solicitation of Interest**

Transmission Provider may elect to proceed with projects without an open season solicitation of interest, in which case Transmission Provider will proceed with the project pursuant to its rights and obligations as a Transmission Provider.

### 19.1.3 Other Sponsored Projects

Funding structures for non-Transmission Provider projects are not addressed in this Tariff. Nothing in this Tariff is intended to preclude any other entity from proposing its own funding structure.

## **19.2 Allocation of Costs**

The Cost Allocation Committee will allocate the costs of projects the Planning Committee selects into the Draft Regional Transmission Plan for purposes of cost allocation according to this Sections. The Cost Allocation Committee shall use the methodology set forth in Sections 19.2.2 to allocate project costs to Beneficiaries.

### 19.2.1 Project Qualification

To be eligible for cost allocation, and therefore selected into the Draft Transmission Plan for purposes of cost allocation, the Planning Committee shall verify that the project:

- a. Was proposed for such purpose by a pre-qualified sponsoring entity, was an unsponsored project identified in the regional planning process, or was an unsponsored project proposed by a stakeholder (or Transmission Provider or non-incumbent transmission developer not desiring to sponsor the project);
- b. Was selected in the Draft Regional Transmission Plan; and
- c. Has an estimated cost exceeding \$20 million.

### 19.2.2 Allocation of Project Costs to Beneficiaries

The Cost Allocation Committee and the Planning Committee initially identify Beneficiaries as all those entities that may be affected by the project based upon the application of the analysis criteria set forth in Section 18.4.2 and using the cost allocation scenarios developed pursuant to Section 19.2.3. For projects eligible to receive a cost allocation, the Cost Allocation Committee shall start with the calculations provided by the Planning Committee pursuant to Section 18.4.1, and remove those entities that do not receive a benefit from the project being evaluated. Before allocating a transmission project's cost, the Cost Allocation Committee will adjust, as appropriate, the calculated initial net benefits for each Beneficiary based upon the following criteria:

- a. The net benefits attributed in any scenario are capped at no less than 50% and no more than 150% of the average of the unadjusted, net benefits (whether positive or negative); and

- b. If the average of the net benefits, as adjusted by (a) above, across the cost allocation scenarios is negative, the average net benefit to that Beneficiary is set to zero.

Each of these adjustments is applied to each Beneficiary independent of other Beneficiaries. The initial (and adjusted) net benefits for the selected Change Case are the sum of the benefits (which numerically may be positive or negative) across each of the analysis criteria. A Beneficiary will be included in the steps above even if only one of the analysis criteria is applicable to that Beneficiary and the estimated benefits for the other analysis criteria are, by definition, zero.

The adjusted net benefits, as determined by applying the limits in the two conditions above, are used for allocating project costs proportionally to Beneficiaries. However, Beneficiaries other than the Applicant will only be allocated costs such that the ratio of adjusted net benefits to allocated costs is no less than 1.10 (or, if there is no Applicant, no less than 1.10). If a Beneficiary has an allocated cost of less than \$100,000, the cost allocated to that Beneficiary is set to zero. The following examples demonstrate the application of the benefit-to-cost ratio:

Example 1: Project Cost = \$800M; B's adjusted net benefits = \$483M; C's (Project Sponsor) adjust net benefits = \$520M. B is allocated \$385M (i.e., the lesser of  $\$800M * (\$483 / (\$483 + \$520)) = \$385M$  OR  $\$483M / 1.1 = \$439.1M$ ) and C is allocated \$415M (i.e.,  $\$800 - \$385 = \$415$ ).

Example 2: Same as Example 1, except Project Cost = \$950M. B is allocated \$439M (i.e., the lesser of  $\$950M * (\$483 / (\$483 + \$520)) = \$457.5M$  OR  $\$483 / 1.10 = \$439.1$ ) and C is allocated \$511M (i.e.,  $\$950 - \$439 = \$511$ ).

Unallocated costs due to the limitations above are reallocated among the remaining Beneficiaries. Reallocation will continue among regional Beneficiaries, which are still above the benefit-cost threshold (i.e., the 1.10 ratio of adjusted net benefits to allocated costs) until either all costs are allocated or there are no Beneficiaries above the 1.10 benefit-cost threshold. The Applicant may voluntarily accept any remaining project costs. Otherwise, if the thresholds prevent all costs from being reallocated among Beneficiaries and the unallocated costs are not accepted by the Applicant, the project is no longer eligible for cost allocation.

The Cost Allocation Committee shall provide its cost allocations to the Planning Committee for its inclusion in the Draft Final Regional Transmission Plan. While the estimation of benefits is not dependent or conditioned on a Beneficiary's receipt of future ownership rights or (Ownership-Like) Rights on the project or the transmission system(s) involved, the Cost Allocation Committee shall identify and provide with the cost allocation of any such project those transmission rights or Ownership-Like Rights that were assumed would be available to and utilized by the Beneficiary in order to realize the benefits attributed to the Beneficiary. "Ownership-Like Rights," as used in this paragraph, refers to those arrangements where an entity has rights in certain transmission facilities or a transmission path owned by another entity (or entities), which are based upon a percentage of the facility or path's rated capacity, and which rights remain through the in-service life of the facility or path.

### 19.2.3 Cost Allocation Scenarios

As set forth in Section 18.3.2, during Quarters 1 and 2, the Cost Allocation Committee (in consultation with the Planning Committee) with stakeholder input, will create cost allocation scenarios for those parameters that likely affect the amount of total benefits of a project and their distribution among Beneficiaries.

The variables in the cost allocation scenarios will include, but are not limited to, load levels by load-serving entity and geographic location, fuel prices, and fuel and resource availability. For example, cost allocation scenarios could include a range of future load levels. Future projections of load levels in a given scenario will be based on factors such as, but not limited to, projected demand for irrigation, economic development, and heating/cooling demands necessitated by weather forecasts in particular geographic locations. These load level projections will be compared against a range of future resource options. Future projections of resource options in a given scenario will be based on factors such as, but not limited to, projected fuel prices and projected yields of particular types of generation resources (e.g. wind, hydro, etc.). In the development of the cost allocation scenarios the Cost Allocation Committee will give consideration to alternative resource planning scenarios developed by transmission providers within the NTTG Footprint as well as scenarios developed by other regional and Western Interconnection entities.

The Cost Allocation Committee shall consider such cost allocation scenarios in its assessment of project benefits and their distribution among Beneficiaries.

Use of cost allocation scenarios recognizes that estimates of the amount and distribution of benefits may be highly uncertain and dependent on key assumptions and projections. By using scenarios that choose data across a range of outcomes for these parameters, the potential impact of these uncertainties is estimated and incorporated in the calculation of net benefits used in cost allocation.

**19.3 Exclusions** The cost for projects undertaken in connection with requests for interconnection or transmission service under Sections II, III, IV or V of the Tariff will be governed solely by the applicable cost allocation methods associated with those requests under the Tariff.

## **20 REEVALUATION**

**20.1 Reevaluation of the Regional Transmission Plan** NTTG expects the sponsor of an Original Project to inform the Planning Committee of any project delay that would potentially affect the in-service date as soon as the delay is known and, at a minimum, when the sponsor re-submits its project development schedule during Quarter 1. If the Planning Committee determines that the Original Project cannot be constructed by its original in-service date, the Planning Committee will reevaluate the Original Project in the context of the current Regional Planning Cycle using an updated in-service date.

“**Committed**” projects are Original Projects that have all permits and rights of way required for construction, as identified in the submitted development schedule, by the end of Quarter 1 of the

current Regional Planning Cycle. Committed projects are not subject to reevaluation, unless the Original Project fails to meet its development schedule milestones such that the needs of the region will not be met, in which case, the Original Project loses its designation as a Committed project.

If “**not Committed,**” the Original Project - whether selected for cost allocation or not - shall be reevaluated, and potentially replaced or deferred, in the current Regional Planning Cycle only in the event that:

- a. The Project Sponsor fails to meet its project development schedule such that the needs of the region will not be met,
- b. The Project Sponsor fails to meet its project development schedule due to delays of governmental permitting agencies such that the needs of the region will not be met, or
- c. The needs of the region change such that a project with an alternative location and/or configuration meets the needs of the region more efficiently or cost effectively.

If condition (a), (b) or (c) is true, then the incumbent transmission provider may propose solutions that it would implement within its retail distribution service territory or footprint (the “New Project”). Both the Original Project and the New Project will be reevaluated or evaluated, respectively, in Quarter 2 as any other project for consideration in the Regional Transmission Plan.

During such reevaluation the Planning Committee shall only consider remaining costs to complete the Original Project against the costs to complete of the other projects being evaluated.

**20.2 Reevaluation of Cost Allocation** A cost allocation shall be performed in each Regional Planning Cycle for any project that has been selected for purposes of cost allocation in the prior Regional Transmission Plan until such project is deemed as “Committed” pursuant to Section 20.1.

## **21 CALCULATIONS**

The Planning Committee shall include the calculations conducted pursuant to Section 18.4 in the Regional Transmission Plan, and the Cost Allocation Committee shall include the calculations conducted pursuant to Section 19.2 in the Regional Transmission Plan. Unless precluded by software licensing requirements or other limitations, the Planning Committee and the Cost Allocation Committee shall utilize best efforts to provide input data, and calculated output data to requesting stakeholders. The Planning Committee and the Cost Allocation Committee shall also identify the models utilized and the contact information of the vendors providing the model to requesting stakeholders. Stakeholders may comment on the clarity of the calculations considered by the Planning Committee and the Cost Allocation Committee.

## **22 ECONOMIC STUDY REQUESTS**

### **22.1 Submission of Economic Study Requests**

Any stakeholder may submit a:

- b. Local Economic Study Request to the Transmission Provider as provided for in Section 7.1;
- c. Regional Economic Study Request to the Planning Committee as provided for in Section 23.1; and
- d. Interconnection-wide Economic Study Request to WECC TEPPC as provided for in Section 33.1.

Be aware that local, regional and interconnection-wide Economic Study processes have different submission windows and requirements. Stakeholders must comply with each process's submission windows and requirements.

### **22.2 Review for Completeness**

The Planning Committee or the Transmission Provider will review the information it receives pursuant to this Section 22.1 for completeness. If a stakeholder fails to meet the information requirements, the Planning Committee or Transmission Provider shall notify the stakeholder of the reasons for such failure. The Planning Committee or Transmission Provider will attempt to remedy deficiencies in the submitted information through informal communications with the stakeholder. If such efforts are unsuccessful within 15 calendar days of the close of the submission window, the Planning Committee or Transmission Provider shall return the stakeholder's information, and stakeholder's request shall be deemed withdrawn. The Planning Committee or Transmission Provider may consider the incomplete data in its consideration of whether to include an unsponsored project that resembles a request set forth in a withdrawn submission. Stakeholder may resubmit the request for consideration during the next submission window with updated information and data deficiencies cured.

### **22.3 Categorization and Processing of Economic Study Requests**

All Economic Study Requests will be categorized by the Planning Committee or the Transmission Provider as a Local Economic Study Request, a Regional Economic Study Request, or an Interconnection-wide Economic Study Request. Local Economic Study Requests will be forwarded to the Transmission Provider and processed as set forth in Section 7. Regional Economic Study Requests will be forwarded to the Planning Committee and processed as set forth in Section 23. Interconnection-wide Economic Study Requests will be forwarded to WECC TEPPC and processed as set forth in Section 33.

## **23 REGIONAL ECONOMIC STUDY REQUESTS**

### **23.1 Submission Windows**

Regional Economic Study Requests may be submitted in Quarters 1 and 5 of each Regional Study Cycle, and must be received by March 31<sup>st</sup> of each year. A Regional Economic Study Request is submitted to the Planning Committee using the Economic Study Request Form found on the NTTG Website. Additionally, to be considered a Regional Economic Study Request, the stakeholder must request membership in the Planning Committee according to the terms and conditions of the Planning Committee Charter, or sign the Economic Study Agreement, attached as Exhibit A. A stakeholder shall submit the completed Economic Study Request Form and signed Economic Study Agreement to the transmission provider from which it obtained the Economic Study Agreement and provide a copy of the Economic Study Request Form and Economic Study Agreement to the Planning Committee, through [info@nttg.biz](mailto:info@nttg.biz).

**23.2 Studies Performed** The Planning Committee will complete up to two (2) Regional Economic Studies per Regional Planning Cycle. By April 30<sup>th</sup> each year, the Planning Committee will determine the Regional Economic Study(ies) to be performed by the end of the respective Quarter 4 or 8 of the Regional Planning Cycle. If the Regional Economic Study cannot be completed by the end of the respective Quarter 4 or 8 of the Regional Planning Cycle, the Planning Committee will notify the study request sponsor of the delay, provide an explanation of the delay, and provide an estimated completion date. If the Planning Committee receives more than two (2) Regional Economic Study Requests per Regional Planning Cycle, it will prioritize the requests and determine which Regional Economic Study Request(s) will be performed based on an evaluation of the following:

- a. The most significant opportunities to reduce overall costs of the Regional Transmission Plan while reliably serving the load growth needs being studied in the Regional Transmission Plan, and
- b. Input from stakeholders at the Planning Committee meeting.

The Planning Committee shall notify the entities submitting Regional Economic Study Requests of its decision.

**23.3 Additional Studies** The Planning Committee will complete additional Regional Economic Study Requests at the sole expense of the parties requesting such studies. A stakeholder shall request an additional study within ten (10) business days of receiving the notice provided for in provided for in Section 23.1, by emailing the Planning Committee chair, through [info@nttg.biz](mailto:info@nttg.biz). Following such notice, Transmission Provider will tender a study agreement that addresses, at a minimum, cost recovery for the Transmission Provider and schedule for completion. The requesting party shall be responsible for the actual cost of the additional regional economic study.

**23.4 Clustering Studying Requests** The Planning Committee will cluster and study together Regional Economic Study Requests if all of the Point(s) of Receipt and Point(s) of Delivery match one another or, in the alternative, it is reasonably determined by the Planning Committee that the Regional Economic Study Requests are geographically and electrically similar, and can be feasibly and meaningfully studied as a group.

**23.5 Unaccommodated Economic Study Requests** All Regional Economic Study Requests not accommodated within the current study cycle will be deemed withdrawn and returned to the stakeholder without action and the stakeholder may submit the Regional Economic Study Request in the next Regional Planning Cycle.

### **23.6 Study Schedule**

In Quarters 1 and 5, Regional Economic Study Requests are submitted by Stakeholders to the Planning Committee. In Quarters 2 and 6, study plans are developed by the Planning Committee for the Regional Economic Study Requests that will be modeled. In Quarters 3 and 7, Regional Economic Studies are performed by the Planning Committee or under the Planning Committee's direction. In Quarters 4 and 8, results of the regional Economic Studies are reported by the Planning Committee in the Draft Regional Transmission Plan and the Regional Transmission Plan, respectively, and provided to the requesting party.

## **Part C. Common Interregional Coordination and Cost Allocation Process**

### **Introduction**

This Part C of Attachment K sets forth common provisions, which are to be adopted by or for each Planning Region and which facilitate the implementation of Order 1000 interregional provisions. NTTG is to conduct the activities and processes set forth in this Part C of Attachment K in accordance with the provisions of this Part C of Attachment K and the other provisions of this Attachment K.

Nothing in this part will preclude any transmission owner or transmission provider from taking any action it deems necessary or appropriate with respect to any transmission facilities it needs to comply with any local, state, or federal requirements.

Any Interregional Cost Allocation regarding any ITP is solely for the purpose of developing information to be used in the regional planning process of each Relevant Planning Region, including the regional cost allocation process and methodologies of each such Relevant Planning Region.

References in this Part C of Attachment K to any transmission planning processes, including cost allocations, are references to transmission planning processes pursuant to Order 1000.

## **24 DEFINITIONS**

The following capitalized terms where used in this Part C of Attachment K, are defined as follows:

**Annual Interregional Coordination Meeting:** shall have the meaning set forth in Section 26 below.

**Annual Interregional Information:** shall have the meaning set forth in Section 25 below.



**CEII:** means Critical Energy Infrastructure Information.

**Interregional Cost Allocation:** means the assignment of ITP costs between or among Planning Regions as described in Section 28.2 below.

**Interregional Transmission Project (“ITP”):** means a proposed new transmission project that would directly interconnect electrically to existing or planned transmission facilities in two or more Planning Regions and that is submitted into the regional transmission planning processes of all such Planning Regions in accordance with Section 27.1.

**Planning Region:** means each of the following Order 1000 transmission planning regions insofar as they are within the Western Interconnection: California Independent System Operator Corporation, ColumbiaGrid, NTTG Transmission Group, and WestConnect.

**Relevant Planning Regions:** means, with respect to an ITP, the Planning Regions that would directly interconnect electrically with such ITP, unless and until such time as a Relevant Planning Region determines that such ITP will not meet any of its regional transmission needs in accordance with Section 27.2, at which time it shall no longer be considered a Relevant Planning Region.

## **25     ANNUAL INTERREGIONAL INFORMATION EXCHANGE**

Annually, prior to the Annual Interregional Coordination Meeting, NTTG is to make available by posting on the NTTG Website or otherwise provide to each of the other Planning Regions the following information, to the extent such information is available in its regional transmission planning process, relating to regional transmission needs in NTTG’s transmission planning region and potential solutions thereto:

- (i) study plan or underlying information that would typically be included in a study plan, such as:
  - a. identification of base cases;
  - b. planning study assumptions; and
  - c. study methodologies;
- (ii) initial study reports (or system assessments); and
- (iii) regional transmission plan

(collectively referred to as “Annual Interregional Information”).

NTTG is to post its Annual Interregional Information on the NTTG Website according to its regional transmission planning process. Each other Planning Region may use in its regional transmission planning process NTTG’s Annual Interregional Information. NTTG may use in its regional transmission planning process Annual Interregional Information provided by other Planning Regions.

NTTG is not required to make available or otherwise provide to any other Planning Region (i) any information not developed by NTTG in the ordinary course of its regional transmission planning process, (ii) any Annual Interregional Information to be provided by any other Planning Region with respect to such other Planning Region, or (iii) any information if NTTG reasonably determines that making such information available or otherwise providing such information would constitute a violation of the Commission’s Standards of Conduct or any other legal requirement. Annual Interregional Information made available or otherwise provided by NTTG shall be subject to applicable confidentiality and CEII restrictions and other applicable laws, under NTTG’s regional transmission planning process. Any Annual Interregional Information made available or otherwise provided by NTTG shall be “AS IS” and any reliance by the receiving Planning Region on such Annual Interregional Information is at its own risk, without warranty and without any liability of NTTG, Transmission Provider, or any entity supplying information in NTTG’s regional transmission planning process, including any liability for (a) any errors or omissions in such Annual Interregional Information, or (b) any delay or failure to provide such Annual Interregional Information.

## **26 ANNUAL INTERREGIONAL COORDINATION MEETING**

NTTG is to participate in an Annual Interregional Coordination Meeting with the other Planning Regions. NTTG is to host the Annual Interregional Coordination Meeting in turn with the other Planning Regions, and is to seek to convene such meeting in February, but not later than March 31<sup>st</sup>. The Annual Interregional Coordination Meeting is to be open to stakeholders. NTTG is to provide notice of the meeting to its stakeholders in accordance with its regional transmission planning process.

At the Annual Interregional Coordination Meeting, topics discussed may include the following:

- (i) each Planning Region’s most recent Annual Interregional Information (to the extent it is not confidential or protected by CEII or other legal restrictions);
- (ii) identification and preliminary discussion of interregional solutions, including conceptual solutions, that may meet regional transmission needs in each of two or more Planning Regions more cost effectively or efficiently; and
- (iii) updates of the status of ITPs being evaluated or previously included in NTTG’s regional transmission plan.

## **27 ITP JOINT EVALUATION PROCESS**

### **27.1 Submission Requirements**

A proponent of an ITP may seek to have its ITP jointly evaluated by the Relevant Planning Regions pursuant to Section 27.2 by submitting the ITP into the regional transmission planning process of each Relevant Planning Region in accordance with such Relevant Planning Region’s regional transmission planning process and no later than March 31<sup>st</sup> of any even-numbered calendar year. Such proponent of an ITP seeking to connect to a transmission facility owned by

multiple transmission owners in more than one Planning Region must submit the ITP to each such Planning Region in accordance with such Planning Region's regional transmission planning process. In addition to satisfying each Relevant Planning Region's information requirements, the proponent of an ITP must include with its submittal to each Relevant Planning Region a list of all Planning Regions to which the ITP is being submitted.

## **27.2 Joint Evaluation of an ITP**

For each ITP that meets the requirements of Section 27.1, NTTG (if it is a Relevant Planning Region) is to participate in a joint evaluation by the Relevant Planning Regions that is to commence in the calendar year of the ITP's submittal in accordance with Section 27.1 or the immediately following calendar year. With respect to any such ITP, NTTG (if it is a Relevant Planning Region) is to confer with the other Relevant Planning Region(s) regarding the following:

- (i) ITP data and projected ITP costs; and
- (ii) the study assumptions and methodologies it is to use in evaluating the ITP pursuant to its regional transmission planning process.

For each ITP that meets the requirements of Section 27.1, NTTG (if it is a Relevant Planning Region):

- (a) is to seek to resolve any differences it has with the other Relevant Planning Regions relating to the ITP or to information specific to other Relevant Planning Regions insofar as such differences may affect NTTG's evaluation of the ITP;
- (b) is to provide stakeholders an opportunity to participate in NTTG's activities under this Section 27.2 in accordance with its regional transmission planning process;
- (c) is to notify the other Relevant Planning Regions if NTTG determines that the ITP will not meet any of its regional transmission needs; thereafter NTTG has no obligation under this Section 27.2 to participate in the joint evaluation of the ITP; and
- (d) is to determine under its regional transmission planning process if such ITP is a more cost effective or efficient solution to one or more of NTTG's regional transmission needs.

## **28 INTERREGIONAL COST ALLOCATION PROCESS**

### **28.1 Submission Requirements**

For any ITP that has been properly submitted in each Relevant Planning Region's regional transmission planning process in accordance with Section 27.1, a proponent of such ITP may also request Interregional Cost Allocation by requesting such cost allocation from NTTG and each

other Relevant Planning Region in accordance with its regional transmission planning process. The proponent of an ITP must include with its submittal to each Relevant Planning Region a list of all Planning Regions in which Interregional Cost Allocation is being requested.

## **28.2 Interregional Cost Allocation Process**

For each ITP that meets the requirements of Section 28.1, NTTG (if it is a Relevant Planning Region) is to confer with or notify, as appropriate, any other Relevant Planning Region(s) regarding the following:

- (i) assumptions and inputs to be used by each Relevant Planning Region for purposes of determining benefits in accordance with its regional cost allocation methodology, as applied to ITPs;
- (ii) NTTG's regional benefits stated in dollars resulting from the ITP, if any; and
- (iii) assignment of projected costs of the ITP (subject to potential reassignment of projected costs pursuant to Section 29.2 below) to each Relevant Planning Region using the methodology described in this Section 28.2.

For each ITP that meets the requirements of Section 28.1, NTTG (if it is a Relevant Planning Region):

- (a) is to seek to resolve with the other Relevant Planning Regions any differences relating to ITP data or to information specific to other Relevant Planning Regions insofar as such differences may affect NTTG's analysis;
- (b) is to provide stakeholders an opportunity to participate in NTTG's activities under this Section 28.2 in accordance with its regional transmission planning process;
- (c) is to determine its regional benefits, stated in dollars, resulting from an ITP; in making such determination of its regional benefits in NTTG, NTTG is to use its regional cost allocation methodology, as applied to ITPs;
- (d) is to calculate its assigned pro rata share of the projected costs of the ITP, stated in a specific dollar amount, equal to its share of the total benefits identified by the Relevant Planning Regions multiplied by the projected costs of the ITP;
- (e) is to share with the other Relevant Planning Regions information regarding what its regional cost allocation would be if it were to select the ITP in its regional transmission plan for purposes of Interregional Cost Allocation; NTTG may use such information to identify its total share of the projected costs of the ITP to be assigned to NTTG in order to determine whether the ITP is a more cost effective or efficient solution to a transmission need in NTTG;

- (f) is to determine whether to select the ITP in its regional transmission plan for purposes of Interregional Cost Allocation, based on its regional transmission planning process; and
- (g) is to endeavor to perform its Interregional Cost Allocation activities pursuant to this Section 28.2 in the same general time frame as its joint evaluation activities pursuant to Section 27.2.

## **29 APPLICATION OF REGIONAL COST ALLOCATION METHODOLOGY TO SELECTED ITP**

### **29.1 Selection by All Relevant Planning Regions**

If NTTG (if it is a Relevant Planning Region) and all of the other Relevant Planning Regions select an ITP in their respective regional transmission plans for purposes of Interregional Cost Allocation, NTTG is to apply its regional cost allocation methodology to the projected costs of the ITP assigned to it under Sections 28.2(d) or 28.2(e) above in accordance with its regional cost allocation methodology, as applied to ITPs.

### **29.2 Selection by at Least Two but Fewer than All Relevant Planning Regions**

If the NTTG (if it is a Relevant Planning Region) and at least one, but fewer than all, of the other Relevant Planning Regions select the ITP in their respective regional transmission plans for purposes of Interregional Cost Allocation, NTTG is to evaluate (or reevaluate, as the case may be) pursuant to Sections 28.2(d), 28.2(e), and 28.2(f) above whether, without the participation of the non-selecting Relevant Planning Region(s), the ITP is selected (or remains selected, as the case may be) in its regional transmission plan for purposes for Interregional Cost Allocation. Such reevaluation(s) are to be repeated as many times as necessary until the number of selecting Relevant Planning Regions does not change with such reevaluation.

If following such evaluation (or reevaluation), the number of selecting Relevant Planning Regions does not change and the ITP remains selected for purposes of Interregional Cost Allocation in the respective regional transmission plans of NTTG and at least one other Relevant Planning Region, NTTG is to apply its regional cost allocation methodology to the projected costs of the ITP assigned to it under Sections 28.2(d) or 28.2(e) above in accordance with its regional cost allocation methodology, as applied to ITPs.

## **Part D. Interconnection-Wide Planning Process Introduction**

Transmission Provider is a member of WECC and supports the work of WECC TEPPC. NTTG may utilize WECC TEPPC for consolidation and completion of congestion and Economic Studies, base cases, and other interconnection-wide planning. NTTG may coordinate with other neighboring regional planning groups directly, through joint study teams, or through the interconnection-wide process. Eligible Customers and stakeholders may participate directly in the WECC processes, pursuant to participation requirements defined by WECC TEPPC, or participate

indirectly through the Transmission Provider via development of the Local Transmission Plan or through the NTTG process as outlined above in Parts B and C.

### **30 TRANSMISSION PROVIDER COORDINATION**

Transmission Provider will coordinate with WECC TEPPC for interconnection-wide planning through its participation in NTTG. Transmission Provider will also use NTTG to coordinate with neighboring regional planning groups including the CAISO, WestConnect, NWPP and Columbia Grid. The goal of NTTG's coordination on an interconnection-wide basis on behalf of Transmission Provider is to (1) share system plans to ensure that they are simultaneously feasible and otherwise use consistent assumptions and data, and (2) identify system enhancements that could relieve congestion or integrate new resources. A description of the interconnection-wide planning process is available via a direct link in the Transmission Provider's Transmission Planning Business Practice at:[http://www.oatioasis.com/PGE/PGEdocs/Transmission\\_Planning.pdf](http://www.oatioasis.com/PGE/PGEdocs/Transmission_Planning.pdf).

### **31 STUDY PROCESS**

WECC TEPPC's transmission planning protocol and information are available on the WECC website. A direct link to the WECC TEPPC process is maintained in the Transmission Provider's Transmission Business Practice at:[http://www.oatioasis.com/PGE/PGEdocs/Transmission\\_Planning.pdf](http://www.oatioasis.com/PGE/PGEdocs/Transmission_Planning.pdf) on the Transmission Provider's OASIS.

### **32 STAKEHOLDER PARTICIPATION**

Stakeholders have access to the interconnection-wide planning process through NTTG's public planning meetings, other regional planning groups, and WECC at their discretion.

### **33 INTERCONNECTION-WIDE ECONOMIC STUDY REQUESTS**

#### **33.1 Submission of Economic Study Requests**

Stakeholders shall submit their Interconnection-wide Economic Study Request to the WECC TEPPC process and provide the Planning Committee with a copy through [info@nttg.biz](mailto:info@nttg.biz).

#### **33.2 Transmission Provider Support of WECC TEPPC**

Transmission Provider will support, directly and through its participation in NTTG, the WECC TEPPC process.

#### **33.1 Interconnection-Wide Economic Study Requests**

Interconnection-wide Economic Study Requests by the will be processed and studied by WECC TEPPC according to its rules and procedures. Results of WECC TEPPC studies will be distributed by WECC TEPPC pursuant to its rules and procedures.

**34     DISPUTE RESOLUTION**

Interconnection-wide dispute resolution will be pursuant to the process developed by WECC. Nothing contained in this Section 34 shall restrict the rights of any party to file a complaint with the Commission under relevant provisions of the Federal Power Act.

**35     COST ALLOCATION**

A Western Interconnection-wide cost allocation methodology does not exist; therefore, cost allocations for interconnection-wide transmission projects will be addressed on a case-by-case basis by parties participating in the project.

## **Exhibit A**

### **Economic Study Agreement**

This Economic Study Agreement (“Agreement”) between the Transmission Provider and the undersigned is entered into by signing below.

#### **Recitals**

- A. The Northern Tier Transmission Group’s (the “Northern Tier”) Planning Committee (the “Planning Committee”) is charged with the task of performing Economic Congestion Studies within the Northern Tier footprint<sup>1</sup> as requested by stakeholders following the process described in the Transmission Provider’s Attachment K;
- B. The Planning Committee operates according to the terms and conditions set forth in the Planning Committee Charter which may be amended from time-to-time by the Northern Tier Steering Committee (the “Steering Committee”) and which is posted on the Northern Tier website, [www.nttg.biz](http://www.nttg.biz);
- C. This Agreement is intended to document an entity’s obligations regarding the Economic Study process, as described herein;

NOW THEREFORE, in consideration of the mutual benefits and other good and valuable consideration the sufficiency of which are hereby recognized, the undersigned hereby agrees as follows:

#### **Section 1. Duration and Termination**

1.1 This Agreement is effective upon execution and shall continue in effect until terminated and the termination is made effective by the Federal Energy Regulatory Commission (the “Commission”); provided, however, the undersigned may independently terminate its participation in this Agreement after giving the Transmission Provider five (5) business days advance notice in writing or through electronic transmission.

#### **Section 2. Obligations of the Undersigned**

2.1 By executing the signature page set forth below, the undersigned, agrees to:

- (a) A Submit Economic Study Requests to the Transmission Provider during the Economic Study Request windows and provide the data required to perform the study;

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<sup>1</sup> The Northern Tier’s footprint is defined by the service territories of those entities that have executed the Northern Tier Funding Agreement, as may be amended from time to time.



- (b) Submit Economic Study Requests to the Transmission Provider during the Economic Study Request windows and provide the data required to perform the study;
- (c) Acknowledge that Economic Study Requests will be evaluated and voted upon by the Planning Committee for potential clustering and selection for the up to two studies that will be performed during the Regional Planning Cycle;
- (d) Be bound by the decisions of the Steering Committee and the Planning Committee, and/or resolve disputes according to the process set forth in Section 17 of Attachment K;
- (e) If the Economic Study requests are not selected as one of the up to two studies, be subject to reimburse NTTG for the actual costs to perform the studies;
- (f) Act in a good faith manner to further the completion of the Economic Study Request according to the terms and conditions of the Planning Committee and Steering Committee Charters, as each may be amended from time-to-time by the Steering Committee;
- (g) The extent practicable, provide support from internal resources to complete the Economic Study;
- (h) Bear its own costs and expenses associated with participation in and support of the Economic Study; and
- (i) Execute non-disclosure agreements, as necessary, before receipt of transmission planning data.

### **Section 3. Miscellaneous**

3.1 Limit of Liability. Neither the Transmission Provider nor the undersigned shall be liable for any direct, incidental, consequential, punitive, special, exemplary, or indirect damages associated with a breach of this Agreement. The Transmission Provider and the undersigned's sole remedy for any breach of this Agreement are to enforce prospective compliance with this Agreement's terms and conditions.

3.2 No Joint Action. This Agreement shall not be interpreted or construed to create an association, joint venture or partnership, or to impose any partnership obligations or liability.

3.3 Ownership of Products. The undersigned agrees not to assert an ownership interest in products created by the efforts of the Planning Committee.

3.4 Amendments. The Transmission Provider retains the right to make a unilateral filing with the Commission to modify this Agreement under Section 205 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations.

3.5 Waiver. A waiver by the Transmission Provider or the undersigned of any default or breach of any covenants, terms or conditions of this Agreement shall not limit the party's right to enforce

such covenants, terms or conditions or to pursue its rights in the event of any subsequent default or breach.

3.6 Severability. If any portion of this Agreement shall be held to be void or unenforceable, the balance thereof shall continue to be effective.

3.7 Binding Effect. This Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of the parties.

3.8 Third Party Beneficiaries. All signatories of the NTTG Funding Agreement are third party beneficiaries of this Agreement.

3.9 Execution. The undersigned may deliver an executed signature page to the Transmission Provider by facsimile transmission.

3.10 Integration. This Agreement constitutes the entire agreement of the Transmission Provider and the undersigned. Covenants or representations not contained or incorporated herein shall not be binding upon the Parties.

IN WITNESS WHEREOF, the undersigned executes this Agreement on the date set forth below.

_____ (Signature)	_____ (Name of Company or Organization)	_____ (Phone)
_____ (Print Signature)	_____ (Street Address)	_____ (Fax)
_____ (Title)	_____ (City, State, Zip Code)	_____ (Email)

**Exhibit B**  
**Steering Committee Charter**



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## **STEERING COMMITTEE**

### **CHARTER**

**Adopted: September 19, 2016**

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# **STEERING COMMITTEE CHARTER**

## **OF**

### **NORTHERN TIER TRANSMISSION GROUP**

(An Unincorporated Association)

This document currently and completely sets forth the charter of the Northern Tier Transmission Group's ("Northern Tier") Steering Committee ("Committee") and supersedes all prior charters whether amended or restated.

#### **ARTICLE 1. PURPOSE AND LIMITATIONS**

1.1. **Purpose.** The Committee shall carry out the responsibilities assigned to the Committee in Attachment K of the Open Access Transmission Tariffs of the entities enrolled in Northern Tier as Full Funders. In addition, the Committee shall provide governance and direction on initiatives undertaken by the Northern Tier Full Funders and Nominal Funders, and approved by the Steering Committee. Those initiatives include, but are not limited to, increasing the efficiency and use of the transmission system to the benefit of customers, and furtherance of markets, regional transmission tariffs, and other transmission products, services, or structures that are economically justified. The Committee shall act in accordance with such Attachment Ks, this charter, and applicable legal and regulatory requirements.

1.2. **Limitations.** The Committee does not have the authority to amend, alter or repeal an Attachment K, or any resolution of any other Northern Tier committee.

#### **ARTICLE 2. MEMBERSHIP**

2.1. **Membership Classes.** The Committee is composed of two classes of members, Class 1 and Class 2.

2.2. **Eligibility for Membership; Becoming a Member.**

(i) *Eligibility.* Class 1 members shall consist only of those entities enrolled in Northern Tier as a Full Funder or Nominal Funder. Class 2 members shall consist only of those state utility commissions, state customer advocates, or state transmission siting agencies within the Northern Tier Footprint (the "Regulators").

(ii) *Becoming a Member.* An entity that satisfies the criteria of the Funding Agreement becomes a member of Class 1 by signing the Funding Agreement. Regulators that satisfy the criteria of Class 2, and that submit a letter requesting membership in the class are members of the class. A Regulator shall submit the letter requesting membership to the Steering Committee through info@nttg.biz.

2.3. **Stakeholder Participation; Eligibility to Vote.** Any stakeholder may participate in Committee meetings. However, only Committee members are the only stakeholders eligible to vote during Committee meetings.

### **ARTICLE 3. MEMBER REPRESENTATIVES**

3.1. **General Powers.** The business and affairs of the Committee shall be carried out through member representatives or their alternates. Each member representative (or alternate properly appointed by the member representative) shall make decisions that further the purposes of Northern Tier and the Committee.

3.2. **Appointment of Member Representative.** Each member is entitled (but not obligated) to appoint one (1) representative to the Committee. The individual must have authority to make decisions. Such member may appoint a representative at any time and may change its representative at any time; provided, however, a representative must be appointed at least one (1) business day in advance of a meeting to be eligible to vote at the meeting. A representative is appointed by the eligible member providing the representative's contact information to the chairs of the Committee using such form as may be established by the chairs for such purposes.

3.3. **Alternate Representative.** A member representative is entitled to appoint one (1) alternate with authority to make decisions to act on behalf of the member representative. An alternate assumes all the authority of the representative during the period of time designated by the member representative. An alternate must be appointed at least one (1) business day in advance of a meeting to be eligible to vote at the meeting. An alternate is appointed by the member representative by providing the alternate's contact information and beginning and ending dates of appointment to the chairs of the Committee using such form as may be established by the chairs for such purposes. An alternate's authority to act on behalf its appointing member representative terminates automatically if the member that appointed the member representative replaces the member representative.

3.4. **State Representatives.** Neither the actions nor positions taken or not taken by Northern Tier, any committee of Northern Tier, or member representative or alternate shall constitute a prejudgment of any issue in a proceeding before a state utility commission or state transmission siting agency.

3.5. **Resignation.** A member representative or an alternate may resign at any time by giving written notice to the chairs. Any resignation shall take effect on the date of the receipt of that notice or at any later time specified by that notice, and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Once a resignation becomes effective, quorum and voting thresholds shall be reduced accordingly, until the eligible entity appoints a new member representative.

3.6. **Removal.** A member representative is automatically removed as a member representative to the Committee if the member representative does not participate directly or through an alternate in three (3) consecutive meetings (whether regular or special). The chairs shall cause notice of removal to be promptly provided to the member representative and member.



While a member may appoint a new member representative to replace the removed member representative, the Committee will not consider the member to have done so for quorum or voting purposes until such time as the member appoints a new member representative and the representative so appointed attends a Committee meeting.

3.7. **No Compensation from Northern Tier.** No member representative or alternate shall receive compensation or any reimbursement of expenses from Northern Tier, the Committee, or a signatory to the Northern Tier Funding Agreement. A member representative or alternate shall look to its appointing member for compensation or reimbursement of expenses.

#### **ARTICLE 4. MEMBER REPRESENTATIVE MEETINGS**

4.1. **Open Meetings and Limitations.** All Committee meetings are public and open to stakeholder participation; provided, however, that attendance may be restricted at a meeting to the extent necessary to address non-public information, critical energy infrastructure information, or other legal or regulatory requirements.

4.2. **Meetings; Notice and Minutes.** The Committee shall hold regular meetings at such times and locations as the Committee shall from time-to-time establish. Special meetings of the Committee may be called at any time by the chairs. Notice of all special meetings shall be transmitted by or on behalf of the chairs to all member representatives and alternates not less than seven (7) calendar days before each meeting. Notice shall be transmitted by email and posted on Northern Tier's website, and contain the date, time and location of the special meeting. Meeting materials shall be posted on the Northern Tier website prior to meeting. The chairs shall cause minutes of each meeting to be taken and posted on Northern Tier's website.

4.3. **Procedure.** The chairs shall establish the order of business at all meetings. In case of dispute regarding procedural matters, Roberts Rules of Order shall be followed.

4.4. **Member Representative List.** The member representative or alternate list in each class shall be established one (1) business day in advance of each meeting.

4.5. **Quorum.** Sixty percent (60%) of the member representatives set forth on the membership list in each class must be present at a meeting for voting to occur at the meeting.

4.6. **Voting.** At any meeting of the Committee at which a quorum is achieved, any business may be transacted, and the Committee may exercise all of its powers. Each member representative or designated alternate shall possess one vote in matters coming before the Committee. Only a member representative or designated alternate may vote at a meeting; provided, however, should the Utility Co-chair or Vice-chair determine that a Class 1 member has failed to timely fund its allocated share as provided for in the Northern Tier Funding Agreement, its right to vote shall be suspended and shall not be considered in determination of quorum or voting percentages; provided, further, that a suspended Class 1 member's voting rights shall be reinstated upon a determination by the Utility Co-chair or Vice-chair that said member has fully funded its allocation share. The Committee shall work to achieve unanimity for any items that require approval. However, if unable to achieve unanimity, the act of two-thirds (2/3) of the

member representatives or alternates in each class that are present at a meeting at which a quorum is achieved shall be the act of the Committee. A member representative or alternate who is present at such a meeting shall be presumed to have assented to the action taken at that meeting unless the member representative or alternate's dissent or abstention is entered in the minutes of the meeting.

4.7. **Action Without Meeting.** Any action that may be taken by the Committee at a meeting may be taken without a meeting if done in the form of a written record (including email). The record shall set forth the action to be taken. The consent of all member representatives on record at the time the vote was initiated shall be the act of the Committee. This consent may be given in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same record.

4.8. **Telephone Participation.** Member representatives and their alternates may participate in Committee meetings by means of a conference telephone or similar communications equipment where all persons participating in the meeting can hear each other at the same time. Participation of a member representative or designated alternate by such means shall constitute presence in person at a meeting.

## **ARTICLE 5. OFFICERS**

5.1. **Officers, Election, and Term.** The officers of the Committee shall be the co-chairs and vice-chairs. The Committee may elect such other officers and assistant officers as it shall deem necessary. On an annual basis coinciding with the first meeting of the Committee in each calendar year, the Committee shall elect from its member representatives (not alternates) two (2) chairs and two (2) vice-chairs. One co-chair and vice-chair shall be a Class 2 member representative that is also a state regulatory utility commissioner ("State Co-chair" and "State Vice-chair") and one co-chair and vice-chair shall be a member representative of a Class 1 Full Funder ("Utility Co-chair" and "Utility Vice-chair").

### 5.2. **Co-Chairs.**

5.2.1. **Joint Responsibility.** The co-chairs are responsible for ensuring the Committee's purposes are achieved, and are the primary public spokespersons for the Committee. The co-chairs shall have such additional powers and duties as shall be prescribed by the Steering Committee.

5.2.2. **Utility Co-Chair Responsibility.** The Utility Co-chair shall have the responsibility to:

- Initiate discussions among the Class 1 member representatives to review budget increases or financing for additional work streams approved by the Steering Committee; and
- Initiate and coordinate the dispute resolution process outlined in Attachment K.

5.2.3. **State Co-Chair Responsibility.** The State Co-chair shall have the responsibility to:

- Lead Steering Committee process and enforce Steering Committee process rules;
- Declare an impasse in any dispute resolution pursuant to the process outlined in Attachment K; and
- Ensure Northern Tier cost allocation processes are followed and send acknowledgement that the process has been followed to regulatory agencies.

5.3. **Vice-Chairs.** The vice-chairs shall perform all duties usually inherent in such office. A vice-chair shall perform the duties of a co-chair in the event of absence or withdrawal of one of the co-chairs. In addition, if one of the member representatives serving as co-chair ceases being a member representative for any reason or submits his resignation as co-chair of the Committee, a vice-chair shall perform the duties of the co-chair for the remainder of the prior co-chair's term. The vice-chair shall have such additional powers and duties as shall be prescribed by the co-chairs. The vice-chairs shall be the individuals intended to become the next co-chairs of the Committee.

5.4. **Removal.** The Committee may remove any officer whenever, in the Committee's judgment, removal will serve the best interests of Northern Tier and the Committee.

5.5. **Resignation.** Any officer may resign at any time by giving written notice to the co-chairs (or, if one of the co-chairs, by giving notice to the other co-chair and to the vice-chairs). Any resignation shall take effect on the date of the receipt of that notice or at any later time specified by that notice, and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective.

5.6. **Vacancies.** Vacancies in any office arising from any cause may be filled by the Committee at any regular or special meeting.

## **ARTICLE 6. MISCELLANEOUS**

6.1. **Sub-Committees.** The Committee chairs may establish subcommittees to the Committee to further the purposes of the Committee. Such subcommittees shall be of limited duration, and shall report to the Committee co-chairs.

6.2. **Dispute Resolution.** Disputes shall be subject to the dispute resolution process outlined in Attachment K of the OATT of the signatories to the Northern Tier Funding Agreement with an OATT.

6.3 **Amendments.** This charter may be amended, in all or any part, by the Committee. At least once a year the Committee should review this charter to determine if it reflects the manner in which the Committee conducts its activities and proscribes a reasonable governance structure for the Committee.

## **CERTIFICATION**

The undersigned hereby certifies that the foregoing Steering Committee Charter of the Northern Tier Transmission Group was adopted at a meeting of the Steering Committee on the

19th day of September, 2016, and that the foregoing was approved to become effective on the effective date of the version of the Northern Tier Transmission Group's Attachment K that satisfies the regional requirements of Order No. 1000.

/s/ Ray Brush  
By \_\_\_\_\_  
Ray Brush, Utility Co-Chair  
Steering Committee  
Northern Tier Transmission Group

/s/ Travis Kavulla  
By \_\_\_\_\_  
Commissioner Travis Kavulla, State Co-Chair  
Steering Committee  
Northern Tier Transmission Group

**Exhibit C**  
**Planning Committee Charter**



## **PLANNING COMMITTEE**

### **CHARTER**

**Adopted: August 27, 2013**

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# **PLANNING COMMITTEE CHARTER**

## **OF**

### **NORTHERN TIER TRANSMISSION GROUP**

(An Unincorporated Association)

This document currently and completely sets forth the charter of the Northern Tier Transmission Group's ("Northern Tier") Planning Committee ("Committee") and supersedes all prior charters whether amended or restated.

#### **ARTICLE 1.**

##### **PURPOSE AND LIMITATIONS**

1.1. **Purpose.** The Committee shall carry out the responsibilities assigned to the Committee in Attachment K of the Open Access Transmission Tariffs of the entities enrolled in Northern Tier as Full Funders. In addition, the Committee shall carry out such additional duties as assigned by the Steering Committee. The Committee shall act in accordance with such Attachment Ks, this charter, and the Steering Committee's directions, and applicable legal and regulatory requirements

1.2. **Limitations.** The Committee does not have the authority to amend, alter or repeal a charter of Northern Tier, an Attachment K, the Practice Document, or any resolution of any other Northern Tier committee.

1.3. **Reporting to Steering Committee.** The Committee shall report to the Steering Committee through its chair.

#### **ARTICLE 2.**

##### **MEMBERSHIP**

2.1. **Membership Classes.** The Committee is composed of three (3) classes of members: Class 1, and Class 2, and Class 3.

2.2. **Eligibility for Membership.** Class 1 members shall consist only of those transmission providers or transmission developers engaged in or intending to engage in the sale of electric transmission service within the Northern Tier Footprint (the "Transmission Provider/Developer Class"). Class 2 members shall consist only of those transmission users engaged in the purchase of electric transmission service within the Northern Tier Footprint, or other entity, which has, or intends to enter into, an interconnection agreement with a transmission provider within the Northern Tier Footprint (the "Transmission User Class"). Class 3 members shall consist only of those state utility commissions, state customer advocates, or state transmission siting agencies within the Northern Tier Footprint (collectively, the "Regulators," and the "Regulatory Class"). Each entity is entitled to only one membership.

2.3. **Stakeholder Participation; Becoming a Member.** Any stakeholder may participate in Committee meetings without signing the Planning Committee Membership Agreement. However, only those stakeholders that satisfy the criteria of a membership class, as described in Section 2.2 above, and execute the Planning Committee Membership Agreement that is attached as Exhibit A to this charter, or that submits a letter requesting membership in the case of Regulators, are members of the Committee. Committee members are the only stakeholders eligible to vote during Committee meetings.

Each signatory of the Northern Tier Funding Agreement that is subject to Federal Energy Regulatory Commission (“Commission”) jurisdiction under the Federal Power Act shall maintain the current form of the Planning Committee Membership Agreement approved by the Steering Committee as an exhibit to this charter, which in turn is an attachment to its respective OATT. Stakeholders seeking to join the Committee as a member of Class 1 (other than a funder) or Class 2 are not required to sign the Planning Committee Membership Agreement of any specific transmission provider. Rather, each stakeholder may choose and execute whichever form it desires to sign. However, a stakeholder must return the executed Planning Committee Membership Agreement to the transmission provider from which it obtained the form and to the Committee chair through [info@nttg.biz](mailto:info@nttg.biz).

Upon receipt of an executed Planning Committee Membership Agreement, that transmission provider will notify the Commission of its execution via the Electronic Quarterly Reports, and the chair of the Committee will cause Northern Tier to maintain a list on its website that identifies every stakeholder that has signed a Planning Committee Membership Agreement. Signatories to the Northern Tier Funding Agreement are automatically members of the Committee, and will be identified on the Northern Tier website as a member of the Committee.

The Committee therefore operates as a single body of all participating stakeholders, with the voting members being the subset composed of each signatory of the Planning Committee Membership Agreement, each signatory of the Northern Tier Funding Agreement, and the Regulators that have requested Committee membership.

### **ARTICLE 3. MEMBER REPRESENTATIVES**

3.1. **General Powers.** The business and affairs of the Committee shall be carried out through member representatives or their alternates. Each member representative (or alternate properly appointed by the member representative) shall make decisions that further the purposes of Northern Tier and the Committee.

3.2. **Appointment of Member Representative.** Each member is entitled (but not obligated) to appoint one (1) representative to the Committee. The individual must have authority to make decisions. Such member may appoint a representative at any time and may change its representative at any time; provided, however, a representative must be appointed at least one (1) business day in advance of a meeting to be eligible to vote at the meeting. A representative is appointed by the eligible member providing the representative’s contact information to the chair of the Committee using such form as may be established by the chair for such purposes.

3.3. **Alternate Representative.** A member representative is entitled to appoint one (1) alternate with authority to make decisions to act on behalf of the member representative. An alternate assumes all the authority of the representative during the period of time designated by the member representative. An alternate must be appointed at least one (1) business day in advance of a meeting to be eligible to vote at the meeting. An alternate is appointed by the member representative by providing the alternate's contact information and beginning and ending dates of appointment to the chair of the Committee using such form as may be established by the chair for such purposes. An alternate's authority to act on behalf of the member representative terminates automatically if the member that appointed the member representative replaces the member representative.

3.4. **State Representatives.** Neither the actions nor positions taken or not taken by Northern Tier, any committee of Northern Tier, or member representative or alternate shall constitute a prejudgment of any issue in a proceeding before a state utility commission or state transmission siting agency.

3.5. **Resignation.** A member representative or an alternate may resign at any time by giving written notice to the chair. Any resignation shall take effect on the date of the receipt of that notice or at any later time specified by that notice, and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Once a resignation takes effect, quorum and voting thresholds shall be reduced accordingly, until the eligible member appoints a new member representative.

3.6. **Removal.** A member representative is automatically removed as member representative to the Committee if the member representative does not participate directly or through an alternate in three (3) consecutive meetings (whether regular or special). The chair shall cause notice of removal to be promptly provided to the member representative and member. While a member may appoint a new member representative to replace the removed member representative, the Committee will not consider the member to have done so for quorum or voting purposes until such time as the member appoints a new member representative and the representative so appointed attends a Committee meeting.

3.7. **No Compensation from Northern Tier.** No member representative or alternate shall receive compensation or any reimbursement of expenses from Northern Tier, the Committee, or a signatory to the Northern Tier Funding Agreement. A member representative or alternate shall look to its appointing member for compensation or reimbursement of expenses.

## **ARTICLE 4.**

### **MEMBER REPRESENTATIVE MEETINGS**

4.1. **Open Meetings and Limitations.** All Committee meetings are public and open to stakeholder participation; provided, however, that attendance may be restricted at a meeting to the extent necessary to address non-public information, critical energy infrastructure information, or other legal or regulatory requirements.

4.2. **Meetings; Notice and Minutes.** The Committee shall hold regular meetings at such times and locations as the Committee shall from time-to-time establish. Special meetings of the Committee may be called at any time by the chair. Notice of all special meetings shall be transmitted by or on behalf of the chair to all member representatives and alternates not less than seven (7) calendar days before each meeting. Notice shall be transmitted by email and posted on Northern Tier's website, and contain the date, time and location of the special meeting. Meeting materials shall be posted on the Northern Tier website prior to meeting. The chair shall cause minutes of each meeting to be taken and posted on Northern Tier's website.

4.3. **Procedure.** The chair shall establish the order of business at all meetings. In case of dispute regarding procedural matters, Roberts Rules of Order shall be followed.

4.4. **Member Representative List.** The member representative list in each class shall be established one (1) business day in advance of each meeting.

4.5. **Quorum.** Sixty percent (60%) of the member representatives or alternates set forth on the membership list in each class must be present at a meeting for voting to occur at the meeting.

4.6. **Voting.** At any meeting of the Committee at which a quorum is achieved, any business may be transacted, and the Committee may exercise all of its powers. Each member representative or its designated alternate shall possess one vote in matters coming before the Committee. Only a member representative or designated alternate may vote at a meeting. The act of a majority of member representatives or alternates in the Transmission Provider/Developer's Class and one other class that are present at a meeting at which a quorum is achieved shall be the act of the Committee. A member representative or alternate who is present at such a meeting shall be presumed to have assented to the action taken at that meeting unless the member representative or alternate's dissent or abstention is entered in the minutes of the meeting.

4.7. **Action Without Meeting.** Any action that may be taken by the Committee at a meeting may be taken without a meeting if done in the form of a written record (including email). The record shall set forth the action to be taken. The consent of all member representatives on record at the time the vote was initiated shall be the act of the Committee. This consent may be given in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same record.

4.8. **Telephone Participation.** Member representatives and their alternates may participate in Committee meetings by means of a conference telephone or similar communications equipment where all persons participating in the meeting can hear each other at the same time. Participation of a member representative or designated alternate by such means shall constitute presence in person at a meeting.

## **ARTICLE 5. OFFICERS**

5.1. **Officers, Election, and Term.** The officers of the Committee shall be the chair and vice-chair. The Committee may elect such other officers and assistant officers as it shall deem necessary. Every two years in the fourth quarter, the Committee shall elect, from its member representatives (not alternates) that are Full Funders of Class 1, a chair and a vice-chair.

5.2. **Chair.** The chair is responsible for ensuring the Committee's purposes are achieved, and is the primary public spokesperson for the Committee. The chair shall preside at all meetings of the Committee. The chair shall be accountable to the Steering Committee. The chair shall otherwise perform all other duties usually inherent in such office. The chair shall have such additional powers and duties as shall be prescribed by the Steering Committee.

5.3. **Vice-Chair.** The vice-chair shall perform all duties usually inherent in such office. The vice-chair shall perform the duties of the chair in the event of absence or withdrawal of the chair. In addition, if the member representative serving as chair ceases being a member representative for any reason or submits his resignation as the chair, the vice-chair shall perform the duties of the chair for the remainder of the prior chair's term. The vice-chair shall have such additional powers and duties as shall be prescribed by the chair. The vice-chair shall be the individual intended to become the next chair of the Committees.

5.4. **Removal.** The Steering Committee or the Committee may remove any officer whenever, in the Steering Committee or Committee's judgment, removal will serve the best interests of Northern Tier and the Committee.

5.5. **Resignation.** Any officer may resign at any time by giving written notice to the chair (or, if the chair, by giving notice to the Steering Committee chairs and to the vice-chair). Any resignation shall take effect on the date of the receipt of that notice or at any later time specified by that notice, and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective.

5.6. **Vacancies.** Vacancies in any office arising from any cause may be filled by the Committee at any regular or special meeting.

## **ARTICLE 6. MISCELLANEOUS**

6.1. **Sub-Committees.** The Committee chair or the Steering Committee may establish subcommittees to the Committee to further the purposes of the Committee. Such subcommittees shall be of limited duration, and shall report to the Committee chair.

6.2. **Dispute Resolution.** Disputes shall be subject to the dispute resolution process outlined in Attachment K of the OATT of the signatories to the Northern Tier Funding Agreement with an OATT.

Amendments. Recommendations to amend this charter, in all or any part, may be developed and approved from time to time by the Committee. Any such Committee recommendation shall be forwarded to the Steering Committee for consideration. At least once a year the Committee or the Steering Committee should review this charter to determine if it reflects the manner in which the Committee conducts its activities and proscribes a reasonable governance structure for the Committee.

## CERTIFICATION

The undersigned hereby certifies that the foregoing Cost Allocation Committee Charter of the Northern Tier Transmission Group was adopted at a meeting of the Steering Committee on the 27<sup>th</sup> day of August, 2013, and that the foregoing was approved to become effective on the effective date of the version of the Northern Tier Transmission Group's Attachment K that satisfies the regional requirements of Order No. 1000.

/s/ Ray Brush

By \_\_\_\_\_  
Ray Brush, Utility Co-Chair  
Steering Committee  
Northern Tier Transmission Group

/s/ Travis Kavulla

By \_\_\_\_\_  
Travis Kavulla, State Co-Chair  
Steering Committee  
Northern Tier Transmission Group

**Exhibit A**  
**Planning Committee Membership Agreement**

This Planning Committee Membership Agreement (“Agreement”) between the Transmission Provider and the undersigned is entered into by signing below.

**Recitals**

A. The Northern Tier Transmission Group’s (the “Northern Tier”) Planning Committee (the “Planning Committee”) is charged with the task of producing a regional transmission plan for the Northern Tier Footprint, and coordinating the transmission plan and its development with other regional planning groups and the interconnection-wide planning activities of the Western Electricity Coordinating Council (“WECC”);

B. The Planning Committee operates according to the terms and conditions set forth Attachment K and the Planning Committee Charter, which may be amended from time-to-time by the Northern Tier Steering Committee (the “Steering Committee”) and which is posted on the Northern Tier website, [www.nttg.biz](http://www.nttg.biz);

C. Attachment K and the Planning Committee Charter provide that any stakeholder may attend and participate in Planning Committee meetings but limits those entities that may formally vote to those entities that become members of the committee and appoint a member representative;

D. This Agreement is intended to document an entity’s membership on the Planning Committee and commit the entity to act in a good faith manner to further the purpose of the Planning Committee and Northern Tier;

E. A list of all members of the Planning Committee is maintained on the Northern Tier website; and

F. The Planning Committee is funded by the signatories to the Northern Tier Funding Agreement (“Funding Members”), as it may be amended from time-to-time, and which has been filed with the Commission and posted on the Northern Tier website.

NOW THEREFORE, in consideration of the mutual benefits and other good and valuable consideration the sufficiency of which are hereby recognized, the undersigned hereby agrees as follows:

**Section 1. Duration and Termination**

1.1 This Agreement is effective upon execution and shall continue in effect until terminated and the termination is made effective by the Federal Energy Regulatory Commission (the “Commission”); provided, however, the undersigned may independently terminate its participation in this Agreement after giving the Transmission Provider five (5) business days advance notice in writing or through electronic transmission.

**Section 2. Obligations of the Undersigned**



2.1 By executing the signature page set forth below, the undersigned, asserts that it is eligible for membership in the requested membership class of the Planning Committee, and agrees that, if requested by the Transmission Provider or the Chair of the Planning Committee, it will provide documentation demonstrating eligibility, and further agrees to:

- (a) Act in a good faith manner to carry out the responsibilities assigned to the Planning Committee in Attachment K, the purposes of the Planning Committee Charter, and the governance of the Steering Committee, as each may be amended from time-to-time;
- (b) Be bound by the decisions of the Steering Committee, the Planning Committee, and the Cost Allocation Committee, and/or resolve disputes according to the process set forth in Attachment K;
- (c) To the extent practicable, provide support from internal resources to achieve the purpose of the Planning Committee Charter and the responsibilities assigned to the Planning Committee in Attachment K;
- (d) Bear its own costs and expenses associated with participation in and support of the Planning Committee;
- (e) Be responsible for the costs of meeting facilities and administration, including third-party contract resources, associated with such meetings, if undersigned requests, in writing to the Planning Committee Chair, that Northern Tier hold a Planning Committee meeting outside the normal cycle as described in the Planning Committee Charter; and
- (f) Execute non-disclosure agreements, as necessary, before receipt of transmission planning data or non-public information.

### **Section 3. Miscellaneous**

3.1 Limit of Liability. Neither the Transmission Provider nor the undersigned shall be liable for any direct, incidental, consequential, punitive, special, exemplary, or indirect damages associated with a breach of this Agreement. The Transmission Provider and the undersigned's sole remedy for any breach of this Agreement are to enforce prospective compliance with this Agreement's terms and conditions.

3.2 No Joint Action. This Agreement shall not be interpreted or construed to create an association, joint venture or partnership, or to impose any partnership obligations or liability.

3.3 Ownership of Products. The undersigned agrees not to assert an ownership interest in products created by the efforts of the Planning Committee and/or the Cost Allocation Committee.

3.4 Amendments. The Transmission Provider retains the right to make a unilateral filing with the Commission to modify this Agreement under Section 205 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations.

3.5 Waiver. A waiver by the Transmission Provider or the undersigned of any default or breach of any covenants, terms or conditions of this Agreement shall not limit the party's right to enforce such covenants, terms or conditions or to pursue its rights in the event of any subsequent default or breach.

3.6 Severability. If any portion of this Agreement shall be held to be void or unenforceable, the balance thereof shall continue to be effective.

3.7 Binding Effect. This Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of the parties.

3.8 Third Party Beneficiaries. All signatories of the NTTG Funding Agreement are third party beneficiaries of this Agreement.

3.9 Execution. The undersigned may deliver an executed signature page to the Transmission Provider by facsimile transmission.

3.10 Integration. This Agreement constitutes the entire agreement of the Transmission Provider and the undersigned. Covenants or representations not contained or incorporated herein shall not be binding upon the Parties.

IN WITNESS WHEREOF, the undersigned executes this Agreement on the date set forth below.

Requested Membership Class \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name of Company or Organization)

\_\_\_\_\_  
(Phone)

\_\_\_\_\_  
(Print Signature)

\_\_\_\_\_  
(Street Address)

\_\_\_\_\_  
(Fax)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(City, State, Zip Code)

\_\_\_\_\_  
(Email)

**Exhibit D**  
**Cost Allocation Committee Charter**



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**COST ALLOCATION COMMITTEE**

**CHARTER**

**Adopted: August 27, 2013**

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# **COST ALLOCATION COMMITTEE CHARTER**

## **OF**

### **NORTHERN TIER TRANSMISSION GROUP**

(An Unincorporated Association)

This document currently and completely sets forth the charter of the Northern Tier Transmission Group's ("Northern Tier") Cost Allocation Committee ("Committee") and supersedes all prior charters whether amended or restated.

#### **ARTICLE 1. PURPOSE AND LIMITATIONS**

1.1. **Purpose.** The Committee shall carry out the responsibilities assigned to the Committee in Attachment K of the Open Access Transmission Tariffs of the entities enrolled in Northern Tier as Full Funders. In addition, the Committee shall carry out such additional duties assigned by the Steering Committee. The Committee shall act in accordance with such Attachment Ks, this charter, the Steering Committee's directions, and applicable legal and regulatory requirements.

1.2. **Limitations.** The Committee does not have the authority to amend, alter or repeal a charter of Northern Tier, an Attachment K, the Practice Document, or any resolution of any other Northern Tier committee.

1.3. **Reporting to Steering Committee.** The Committee shall report to the Steering Committee through its chair.

#### **ARTICLE 2. MEMBERSHIP**

2.1. **Membership Classes.** The Committee is composed of two classes of members, Class 1 and Class 2.

2.2. **Eligibility for Membership.** Class 1 members shall consist only of those entities enrolled in Northern Tier as a funder and that have appointed a representative to the Steering Committee. Class 2 members shall consist only of those state utility commissions, state consumer advocates, or state transmission siting agencies within the Northern Tier Footprint that have appointed a representative to the Steering Committee (the "Regulators").

2.3. **Stakeholder Participation; Becoming a Member.** Any stakeholder may participate in Committee meetings. However, only those stakeholders that satisfy the criteria of a membership class, as described in Section 2.2 above, or that submits a letter requesting membership in the case of Regulators, are members of the Committee. Committee members are the only stakeholders eligible to vote during Committee meetings. The Committee therefore operates as a single body of all participating stakeholders, with the voting members being the subset composed of the members of Class 1 and Class 2

**ARTICLE 3.**  
**MEMBER REPRESENTATIVES**

3.1. **General Powers.** The business and affairs of the Committee shall be carried out through member representatives or their alternates. Each member representative (or alternate properly appointed by the member representative) shall make decisions that further the purposes of Northern Tier and the Committee.

3.2. **Appointment of Member Representative.** Each member is entitled (but not obligated) to appoint one (1) representative to the Committee. The individual must have authority to make decisions. Such member may appoint a representative at any time and may change its representative at any time; provided, however, a representative must be appointed at least one (1) business day in advance of a meeting to be eligible to vote at the meeting. A representative is appointed by the eligible member providing the representative's contact information to the chair of the Committee using such form as may be established by the chair for such purposes.

3.3. **Alternate Representative.** A member representative is entitled to appoint one (1) alternate with authority to make decisions to act on behalf of the member representative. An alternate assumes all the authority of the representative during the period of time designated by the member representative. An alternate must be appointed at least one (1) business day in advance of a meeting to be eligible to vote at the meeting. An alternate is appointed by the member representative by providing the alternate's contact information and beginning and ending dates of appointment to the chair of the Committee using such form as may be established by the chair for such purposes. An alternate's authority to act on behalf its appointing member representative terminates automatically if the member that appointed the member representative replaces the member representative.

3.4. **State Representatives.** Neither the actions nor positions taken or not taken by Northern Tier, any committee of Northern Tier, or member representative or alternate shall constitute a prejudgment of any issue in a proceeding before a state utility commission or state transmission siting agency.

3.5. **Resignation.** A member representative or an alternate may resign at any time by giving written notice to the chair. Any resignation shall take effect on the date of the receipt of that notice or at any later time specified by that notice, and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Once a resignation takes effect, quorum and voting thresholds shall be reduced accordingly, until the eligible member appoints a new member representative.

3.6. **Removal.** A member representative is automatically removed as member representative to the Committee if the member representative does not participate directly or through an alternate in three (3) consecutive meetings (whether regular or special). The chair shall cause notice of removal to be promptly provided to the member representative and member. While a member may appoint a new member representative to replace the removed member representative, the Committee will not consider the member to have done so for quorum or voting purposes until such time as the member appoints a new member representative and the representative so appointed attends a Committee meeting.



3.7. **No Compensation from Northern Tier.** No member representative or alternate shall receive compensation or any reimbursement of expenses from Northern Tier, the Committee, or a signatory to the Northern Tier Funding Agreement. A member representative or alternate shall look to its appointing member for compensation or reimbursement of expenses.

#### **ARTICLE 4. MEMBER REPRESENTATIVE MEETINGS**

4.1. **Open Meetings and Limitations.** All Committee meetings are public and open to stakeholder participation; provided, however, that attendance may be restricted at a meeting to the extent necessary to address non-public information, critical energy infrastructure information, or other legal or regulatory requirements.

4.2. **Meetings; Notice and Minutes.** The Committee shall hold regular meetings at such times and locations as the Committee shall from time-to-time establish. Special meetings of the Committee may be called at any time by the chair. Notice of all special meetings shall be transmitted by or on behalf of the chair to all member representatives and alternates not less than seven (7) calendar days before each meeting. Notice shall be transmitted by email and posted on Northern Tier's website, and contain the date, time and location of the special meeting. Meeting materials shall be posted on the Northern Tier website prior to meeting. The chair shall cause minutes of each meeting to be taken and posted on Northern Tier's website.

4.3. **Procedure.** The chair shall establish the order of business at all meetings. In case of dispute regarding procedural matters, Roberts Rules of Order shall be followed.

4.4. **Member Representative List.** The member representative list in each class shall be established one (1) business day in advance of each meeting.

4.5. **Quorum.** Sixty percent (60%) of the member representatives or alternates set forth on the membership list in each class must be present at a meeting for voting to occur at the meeting.

4.6. **Voting.** At any meeting of the Committee at which a quorum is achieved, any business may be transacted, and the Committee may exercise all of its powers. Each member representative or its designated alternate shall possess one vote in matters coming before the Committee. Only a member representative or designated alternate may vote at a meeting. The act of a majority of member representatives or alternates in each class that are present at a meeting at which a quorum is achieved shall be the act of the Committee. A member representative or alternate who is present at such a meeting shall be presumed to have assented to the action taken at that meeting unless the member representative or alternate's dissent or abstention is entered in the minutes of the meeting.

4.7. **Action Without Meeting.** Any action that may be taken by the Committee at a meeting may be taken without a meeting if done in the form of a written record (including email). The record shall set forth the action to be taken. The consent of all member representatives on record at the time the vote was initiated shall be the act of the Committee. This consent may be given in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same record.

4.8. **Telephone Participation.** Member representatives and their alternates may participate in Committee meetings by means of a conference telephone or similar communications equipment where all persons participating in the meeting can hear each other at the same time. Participation of a member representative or designated alternate by such means shall constitute presence in person at a meeting.

## **ARTICLE 5. OFFICERS**

5.1. **Officers, Election, and Term.** The officers of the Committee shall be the chair and vice-chair. The Committee may elect such other officers and assistant officers as it shall deem necessary. Every two years in the fourth quarter, the Committee shall elect, from its member representatives (not alternates) of Class 1, a chair and a vice-chair.

5.2. **Chair.** The chair is responsible for ensuring the Committee's purposes are achieved, and is the primary public spokesperson for the Committee. The chair shall preside at all meetings of the Committee. The chair shall be accountable to the Steering Committee. The chair shall otherwise perform all other duties usually inherent in such office. The chair shall have such additional powers and duties as shall be prescribed by the Steering Committee.

5.3. **Vice-Chair.** The vice-chair shall perform all duties usually inherent in such office. The vice-chair shall perform the duties of the chair in the event of absence or withdrawal of the chair. In addition, if the member representative serving as chair ceases being a member representative for any reason or submits his resignation as the chair, the vice-chair shall perform the duties of the chair for the remainder of the prior chair's term. The vice-chair shall have such additional powers and duties as shall be prescribed by the chair. The vice-chair shall be the individual intended to become the next chair of the Committee.

5.4. **Removal.** The Steering Committee or the Committee may remove any officer whenever, in the Steering Committee or Committee's judgment, removal will serve the best interests of Northern Tier and the Committee.

5.5. **Resignation.** Any officer may resign at any time by giving written notice to the chair (or, if the chair, by giving notice to the Steering Committee chairs and to the vice-chair). Any resignation shall take effect on the date of the receipt of that notice or at any later time specified by that notice, and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective.

5.6. **Vacancies.** Vacancies in any office arising from any cause may be filled by the Committee at any regular or special meeting.

## **ARTICLE 6. MISCELLANEOUS**

6.1. **Sub-Committees.** The Committee chair or the Steering Committee may establish subcommittees to the Committee to further the purposes of the Committee. Such subcommittees shall be of limited duration, and shall report to the Committee chair.

6.2. **Dispute Resolution.** Disputes shall be subject to the dispute resolution process outlined in Attachment K of the OATT of the signatories to the Northern Tier Funding Agreement with an OATT.

6.3. **Amendments.** Recommendations to amend this charter, in all or any part, may be developed and approved from time to time by the Committee. Any such Committee recommendation shall be forwarded to the Steering Committee for consideration. At least once a year the Committee or the Steering Committee should review this charter to determine if it reflects the manner in which the Committee conducts its activities and proscribes a reasonable governance structure for the Committee.

## CERTIFICATION

The undersigned hereby certifies that the foregoing Cost Allocation Committee Charter of the Northern Tier Transmission Group was adopted at a meeting of the Steering Committee on the 27th day of August, 2013, and that the foregoing was approved to become effective on the effective date of the version of the Northern Tier Transmission Group's Attachment K that satisfies the regional requirements of Order No. 1000.

/s/ Ray Brush

By \_\_\_\_\_  
Ray Brush, Utility Co-Chair  
Steering Committee  
Northern Tier Transmission Group

/s/ Travis Kavulla

By \_\_\_\_\_  
Travis Kavulla, State Co-Chair  
Steering Committee  
Northern Tier Transmission Group

## ATTACHMENT L

### Creditworthiness Procedures

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#### 1. Applicability

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These Creditworthiness Procedures will be used to determine the ability of a Transmission Customer to meet its obligations under this Tariff. The Transmission Provider will review each Transmission Customer's creditworthiness prior to the execution of a Service Agreement to determine the amount of any security required as a condition of such service. In assessing the credit of a Transmission Customer, the Transmission Provider will consider the qualitative and quantitative measures listed in Section 3B of these Procedures.

#### 2. Information Required from Transmission Customer

A Transmission Customer must provide the Transmission Provider with the following information:

- A. The most recent two years of audited, independent financial statements, and the most recent interim quarterly statements, including balance sheet, income statement, statement of cash flows and related footnotes. If these are not available, then Transmission Customer must provide the most recent two years of financial statements of an investment grade company willing to guarantee all financial obligations of the Transmission Customer pursuant to Section 4D of these Procedures.
- B. S&P and/or Moody's senior long term unsecured credit ratings. In the case of governmental customers, general obligations or revenue bond ratings may apply.

C. If the Transmission Customer is applying for Network Integration Transmission Service it must, to the extent possible, identify the load it will be serving.

D. If the Transmission Customer is applying for Short Term Firm or Non-Firm Point-to-Point Service, it must, to the extent possible, provide an estimate of the amount of service it will be taking.

~~D.~~

### 3. Summary of the Procedure for Determining the Level of Secured and Unsecured Credit.

A. Determination of Credit Levels and Required Security. The Transmission Provider will evaluate each Transmission Customer based on the information provided by the Transmission Customer and otherwise available to the Transmission Provider. The Transmission Provider will determine a credit score for each Transmission Customer that meets the minimum requirements for unsecured credit. The credit score is determined by inputting the quantitative factors described in Section B below into an internal scoring model. A weighted average score is then calculated using these inputs. In addition to the scoring model, the Transmission Provider will consider the qualitative factors described in Section B below. Based on these factors the Transmission Provider will determine the amount of credit to be extended and any required security.

#### Minimum Requirements

The following minimum factors must be met in order to qualify for unsecured credit:

- Audited financial statements from the past two years, and the most recent interim quarterly statements, that meet the criteria set forth in section 2A.
- Investment grade senior long term unsecured credit ratings from S&P and/or Moody's of at least BBB- and Baa3, respectively. If Transmission Customer is rated by both agencies, both ratings must be investment grade. In the case of governmental customers, general obligations or revenue bond ratings may apply.

B. **Factors Considered.** The Transmission Provider will evaluate all Transmission Customers on a comparable and non-discriminatory basis. In determining the amount of credit to be extended to a Transmission Customer, the Transmission Provider will consider both quantitative and qualitative factors including the following:

#### (1) Quantitative Factors

The following quantitative factors are input into the internal scoring model to determine a credit score.

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- Financial statement amounts used to calculate customary financial statement measures such as total debt to total capitalization and tangible net worth.
- Investment grade senior long-term unsecured credit ratings from S&P and/or Moody's.

(2) **Qualitative Factors.**

The following are some of the qualitative factors considered:

- Demonstration of strong financial standing as a stand alone entity and ability to show access to internal and external financial resources that provide sufficient liquidity to support existing and proposed obligations.
- Litigation and contingencies.
- Payment history with Transmission Provider, including default under any payment obligations, if applicable.
- Transmission Customer's ownership structure.
- Length of time Transmission Customer has been in business.
- Publicly available information concerning Transmission Customer, e.g. press releases, annual reports, etc.
- The Transmission Customer or its guarantor is a federal government agency and i) its financial obligations under the Tariff are backed by the full faith and credit of the United States, and/or ii) has the ability to raise rates to cover outstanding obligations.

**C. Credit Limits**

(1) **Unsecured Credit Limits.** Unsecured credit limits will be determined by the Transmission Provider on a case by case basis upon consideration of the credit score and qualitative factors as discussed in Section 3B of these Procedures.

(2) **Acceptable Credit Limits.**

- An Acceptable Credit Limit exists when the unsecured credit limit is greater than or equal to the Maximum Exposure. Maximum Exposure is defined as the dollar value of up to the maximum

monthly anticipated charge for services provided under the OATT multiplied by a factor of six (6).

- The Transmission Provider reserves the right to adjust the Maximum Exposure, and the amount of security required, if a Transmission Customer's actual maximum monthly charges significantly deviate from the Transmission Customer's maximum monthly anticipated charges.
- Transmission Customers who qualify for an Acceptable Credit Limit will not be required to supply any security.

D. **Initial Requirement to Post Security.** Transmission Customers who do not qualify for an Acceptable Credit Limit, are below investment grade or do not have audited financial statements will be required to post security. The Transmission Provider will notify such customers by email of the requirement to post security. Upon request by the Transmission Customer, the Transmission Provider will provide the Transmission Customer with a written explanation of how the Transmission Provider applied this credit evaluation to the Transmission Customer.

E. **Right to Contest Initial Determination of Credit Limits or Security Requirements.** The Transmission Customer may contest the initial determination of credit limits or security requirements by submitting a written explanation of its reasons for challenging the credit levels or security requirements to the Transmission Provider. Within ten (10) Working Days of receiving Transmission Customer's written explanation, the Transmission Provider will review and provide a written response to the Transmission Customer's written explanation. Transmission Customers requesting new transmission service must post any required security no less than ten (10) Working Days prior to the commencement of service.

F. **Reevaluation of Credit Risk.** The Transmission Provider will reevaluate each Transmission Customer's credit risk on an annual basis, or as needed, and may adjust a Transmission Customer's credit limits and corresponding security requirements based on such reevaluation. In conducting the reevaluation, the Transmission Provider will consider the factors identified in Section 3B of these Procedures. As part of its reevaluation, the Transmission Provider may require a Transmission Customer to provide updated financial information. The Transmission Provider will notify the Transmission Customer by email of a change in credit limits or security requirements and provide a written explanation of any such changes. Within five (5) Working Days from receipt of a notice of change in credit or security requirements, the Transmission Customer must either post the additional security required by the Transmission Provider or otherwise cure a non-creditworthy determination. The Transmission Customer may also contest the Transmission Provider's determination of credit levels or security requirement pursuant to Subsection G below.

G. **Right to Contest Reevaluation.** The Transmission Customer may contest the reevaluation of credit levels or security requirements by submitting a written explanation of its reasons for challenging the credit levels or security requirements



to the Transmission Provider. The written explanation is due within five (5) days from receipt of a notice of change in credit or security requirements. Within five (5) Working Days of receiving Transmission Customer's written explanation, the Transmission Provider will review and provide a written response to the Transmission Customer's written explanation. A determination of credit limits or requirement to post additional security will remain in effect during the period of contest and will be a condition of service under the applicable Service Agreement.

**4. Acceptable Forms of Security:**

Transmission Provider will accept the following forms of security:

- A. **Cash** - A cash deposit in the amount of the requested security may be posted. Interest will accrue on the deposit in accordance with the methodology set forth in FERC regulations at 18 CFR § 35.19a(a)(2)(iii). The Transmission Provider will return the deposit with interest, to the customer at such time as the security is no longer required either due to a change in the Transmission Customer's credit score or the termination or expiration of the Service Agreement.
- B. **Cash Prepayment** – A cash prepayment may be provided to pay for transmission service prior to the scheduling of such service. The Transmission Provider will apply the cash prepayment to the Transmission Customer's invoice for that billing month. Any portion of the prepayment that is not used at the end of the billing cycle will be shown as a credit on the invoice. Interest paid on cash prepayments only as required by this Tariff.
- C. **Letter of Credit** – A customer may supply a letter of credit in the format and with language substantially conforming to that found in the Transmission Provider's template posted on OASIS. This letter of credit must be irrevocable and be drawn from an institution acceptable to the Transmission Provider. It must have an expiration date that exceeds the expiration date of the Service Agreement by thirty (30) days, be automatically extended annually, or be renewed 60 days prior to the expiration date. If renewal notification from the financial institution is not received within 60 days of the expiration date, a cash deposit equal to the security required must be received within 30 days of the expiration date.
- D. **Guarantee** – the Transmission Provider will accept an unconditional and unlimited guarantee for all financial obligations of the Transmission Customer from an investment grade entity, so long as that entity qualifies for an Acceptable Credit Limit based on the Maximum Exposure of the Transmission Customer and the procedures for determining the level of credit of the guarantying entity as described in Section 3 above. The Transmission Provider may accept a limited guarantee for all financial obligations of a Transmission Customer taking short-term firm and non-firm service. The credit limit for the Transmission Customer will be based upon Transmission Provider's credit evaluation of the supporting company. The guarantee must be in the format and with language substantially conforming to that found in the Transmission Provider's template posted on OASIS.
- E. **Other reasonable form of assurance agreeable to the Transmission Provider.**

**5. Additional Information**

Additional information about the credit requirements and procedures related to service under this Tariff may be posted on Transmission Provider's OASIS.

~~Portland General Electric Company~~

~~FERC Electric Tariff~~

~~Fourth Revised Volume No. 8~~

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**ATTACHMENT M**

**SMALL GENERATOR  
INTERCONNECTION PROCEDURES (SGIP)**

**(For Generating Facilities No Larger Than 20 MW)**

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Attachment 6 – Feasibility Study Agreement

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## **Section 1. Application**

### **1.1 Applicability**

- 1.1.1 A request to interconnect a certified Small Generating Facility (See Attachments 3 and 4 for description of certification criteria) to the Transmission Provider's Distribution System shall be evaluated under the section 2 Fast Track Process if the eligibility requirements of section 2.1 are met. A request to interconnect a certified inverter-based Small Generating Facility no larger than 10 kilowatts (kW) shall be evaluated under the Attachment 5 10 kW Inverter Process. A request to interconnect a Small Generating Facility no larger than 20 megawatts (MW) that does not meet the eligibility requirements of section 2.1, or does not pass the Fast Track Process or the 10 kW Inverter Process, shall be evaluated under the section 3 Study Process. If the Interconnection Customer wishes to interconnect its Small Generating Facility using Network Resource Interconnection Service, it must do so under the Standard Large Generator Interconnection Procedures and execute the Standard Large Generator Interconnection Agreement.
- 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 Neither these procedures nor the requirements included hereunder apply to Small Generating Facilities interconnected or approved for interconnection prior to 60 Business Days after the effective date of these procedures.
- 1.1.4 Prior to submitting its Interconnection Request (Attachment 2), the Interconnection Customer may ask the Transmission Provider's interconnection contact employee or office whether the proposed interconnection is subject to these procedures. The Transmission Provider shall 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

1.2.1 The 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 the 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 the Transmission Provider's Internet web site. Electric system information provided to the Interconnection Customer should include relevant system studies, interconnection studies, and other materials useful to an understanding of an interconnection at a particular point on the Transmission Provider's Transmission System, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. The Transmission Provider shall comply with reasonable requests for such information.

1.2.2 In addition to the information described in section 1.2.1, which may be provided in response to an informal request, an Interconnection Customer may submit a formal written request form along with a non-refundable fee of \$300 for a pre-application report on a proposed project at a specific site. The Transmission Provider shall provide the pre-application data described in section 1.2.3 to the Interconnection Customer within 20 Business Days of receipt of the completed request form and payment of the \$300 fee. The pre-application report produced by the Transmission Provider is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to the Transmission Provider's system. The written pre-application report request form shall include the information in sections 1.2.2.1 through 1.2.2.8 below to clearly and sufficiently identify the location of the proposed Point of Interconnection.

- 1.2.2.1 Project contact information, including name, address, phone number, and email address.
- 1.2.2.2 Project location (street address with nearby cross streets and town)
- 1.2.2.3 Meter number, pole number, or other equivalent information identifying proposed Point of Interconnection, if available.

- 1.2.2.4 Generator Type (e.g., solar, wind, combined heat and power, etc.)
  - 1.2.2.5 Size (alternating current kW)
  - 1.2.2.6 Single or three phase generator configuration
  - 1.2.2.7 Stand-alone generator (no onsite load, not including station service – Yes or No?)
  - 1.2.2.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify if the load is expected to change.
- 1.2.3. Using the information provided in the pre-application report request form in section 1.2.2, the Transmission Provider will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Interconnection. This selection by the Transmission Provider does not necessarily indicate, after application of the screens and/or study, that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional pre-application reports if information about multiple Points of Interconnection is requested. Subject to section 1.2.4, the pre-application report will include the following information:
- 1.2.3.1 Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.
  - 1.2.3.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.
  - 1.2.3.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.
  - 1.2.3.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).
  - 1.2.3.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

- 1.2.3.6 Nominal distribution circuit voltage at the proposed Point of Interconnection.
  - 1.2.3.7 Approximate circuit distance between the proposed Point of Interconnection and the substation.
  - 1.2.3.8 Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in section 2.4.4.1.1 below and absolute minimum load, when available.
  - 1.2.3.9 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area. Identify whether the substation has a load tap changer.
  - 1.2.3.10 Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.
  - 1.2.3.11 Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.
  - 1.2.3.12 Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.
  - 1.2.3.13 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.
- 1.2.4 The pre-application report need only include existing data. A pre-application report request does not obligate the Transmission Provider to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the Transmission Provider cannot complete all or some of a pre-application report due to lack of available data, the Transmission Provider shall provide the Interconnection Customer with a pre-application report that includes the data that is available. The provision of information on “available capacity” pursuant to section 1.2.3.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process,

and data provided in the pre-application report may become outdated at the time of the submission of the complete Interconnection Request. Notwithstanding any of the provisions of this section, the Transmission Provider shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.

### 1.3 Interconnection Request

The Interconnection Customer shall submit its Interconnection Request to the Transmission Provider, together with the processing fee or 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. The Interconnection Customer shall be notified of receipt by the Transmission Provider within three Business Days of receiving the Interconnection Request. The Transmission Provider shall notify the 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, the 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. The 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 the 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 the 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 the Transmission Provider and the 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 the Interconnection Customer and the entity having the right to sell, lease, or grant the Interconnection Customer the right to possess or occupy a site for such purpose.

## 1.6 Queue Position

The 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. The Transmission Provider shall maintain a single queue per geographic region. At the 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**

### 2.1 Applicability

The Fast Track Process is available to an Interconnection Customer proposing to interconnect its Small Generating Facility with the Transmission Provider's Distribution System if the Small Generating Facility's capacity does not exceed the size limits identified in the table below. Small Generating Facilities below these limits are eligible for Fast Track review. However, Fast Track eligibility is distinct from the Fast Track Process itself, and eligibility does not imply or indicate that a Small Generating Facility

will pass the Fast Track screens in section 2.2.1 below or the Supplemental Review screens in section 2.4.4 below.

Fast Track eligibility is determined based upon the generator type, the size of the generator, voltage of the line and the location of and the type of line at the Point of Interconnection. All Small Generating Facilities connecting to lines greater than 69 kilovolt (kV) are ineligible for the Fast Track Process regardless of size. All synchronous and induction machines must be no larger than 2 MW to be eligible for the Fast Track Process, regardless of location. For certified inverter-based systems, the size limit varies according to the voltage of the line at the proposed Point of Interconnection. Certified inverter-based Small Generating Facilities located within 2.5 electrical circuit miles of a substation and on a mainline (as defined in the table below) are eligible for the Fast Track Process under the higher thresholds according to the table below. In addition to the size threshold, the Interconnection Customer's proposed Small Generating Facility must meet the codes, standards, and certification requirements of Attachments 3 and 4 of these procedures, or the Transmission Provider has to have reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

<u>Fast Track Eligibility for Inverter-Based Systems</u>		
Line Voltage	Fast Track Eligibility Regardless of Location	Fast Track Eligibility on a Mainline [1] and $\leq 2.5$ Electrical Circuit Miles from Substation [2]
$< 5$ kV	$\leq 500$ kW	$\leq 500$ kW
$\geq 5$ kV and $< 15$ kV	$\leq 2$ MW	$\leq 3$ MW
$\geq 15$ kV and $< 30$ kV	$\leq 3$ MW	$\leq 4$ MW
$\geq 30$ kV and $\leq 69$ kV	$\leq 4$ MW	$\leq 5$ MW

[1] For purposes of this table, a mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

[2] An Interconnection Customer can determine this information about its proposed interconnection location in advance by requesting a pre-application report pursuant Section 1.2.

## 2.2 Initial Review

Within 15 Business Days after the Transmission Provider notifies the Interconnection Customer it has received a complete Interconnection Request, the Transmission Provider shall perform an initial review using the screens set forth below, shall notify the Interconnection Customer of the results, and include with the notification copies of the analysis and data underlying the Transmission Provider's determinations under the screens.

### 2.2.1 Screens

2.2.1.1 The proposed Small Generating Facility's Point of Interconnection must be on a portion of the Transmission Provider's Distribution System that is subject to the Tariff.

2.2.1.2 For interconnection of a proposed Small Generating Facility to a radial distribution circuit, the aggregated generation, including the



proposed Small Generating Facility, on the circuit shall not exceed 15 % of the line section annual peak load as most recently measured at the substation. A line section is that portion of a Transmission Provider's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.

- 2.2.1.3 For interconnection of a proposed Small Generating Facility to the load side of spot network protectors, the proposed Small Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5 % of a spot network's maximum load or 50 kW[3].

[3] A spot network is a type of distribution system found within modern commercial buildings to provide high reliability of service to a single customer. (Standard Handbook for Electrical Engineers, 11th edition, Donald Fink, McGraw Hill Book Company).

- 2.2.1.4 The proposed Small Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than 10 % to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

- 2.2.1.5 The proposed Small Generating Facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5 % of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5 % of the short circuit interrupting capability.

- 2.2.1.6 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Transmission

Provider's electric power system due to a loss of ground during the operating time of any anti-islanding function.

<b>Primary Distribution Line Type</b>	<b>Type of Interconnection to Primary Distribution Line</b>	<b>Result/Criteria</b>
Three-phase, three wire	3-phase or single phase, phase-to-phase	Pass Screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass Screen

2.2.1.7 If the proposed Small Generating Facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Small Generating Facility, shall not exceed 20 kW.

2.2.1.8 If the proposed Small Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20 % of the nameplate rating of the service transformer.

2.2.1.9 The Small Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Small Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the point of interconnection).

2.2.1.10 No construction of facilities by the Transmission Provider on its own system shall be required to accommodate the Small Generating Facility.

2.2.2 If the proposed interconnection passes the screens, the Interconnection Request shall be approved and the Transmission Provider will provide the Interconnection Customer an executable interconnection agreement within five Business Days after the determination.

- 2.2.3 If the proposed interconnection fails the screens, but the Transmission Provider determines that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the Transmission Provider shall provide the Interconnection Customer an executable interconnection agreement within five Business Days after the determination.
- 2.2.4 If the proposed interconnection fails the screens, and the Transmission Provider does not or cannot determine from the initial review that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the Transmission Provider shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.

### 2.3 Customer Options Meeting

If the Transmission Provider determines the Interconnection Request cannot be approved without (1) minor modifications at minimal cost, (2) supplemental study or other additional studies or actions, or (3) incurring significant cost to address safety, reliability, or power quality problems, the Transmission Provider shall notify the Interconnection Customer of that determination within five Business Days after the determination and provide copies of all data and analyses underlying its conclusion. Within ten Business Days of the Transmission Provider's determination, the Transmission Provider shall offer to convene a customer options meeting with the Transmission Provider to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the Transmission Provider's determination, or at the customer options meeting, the Transmission Provider shall:

- 2.3.1 Offer to perform facility modifications or minor modifications to the Transmission Provider's electric system (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Transmission Provider's electric system. If the Interconnection Customer agrees to pay for the modifications to the Transmission Provider's electric system, the Transmission Provider will provide the Interconnection Customer with an executable interconnection agreement within ten Business Days of the customer options meeting; or

- 2.3.2 Offer to perform a supplemental review in accordance with section 2.4 and provide a non-binding good faith estimate of the costs of such review; or
- 2.3.3 Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under the section 3 Study Process.

## 2.4 Supplemental Review

- 2.4.1 To accept the offer of a supplemental review, the Interconnection Customer shall agree in writing and submit a deposit for the estimated costs of the supplemental review in the amount of the Transmission Provider's good faith estimate of the costs of such review, both within 15 Business Days of the offer. If the written agreement and deposit have not been received by the Transmission Provider within that timeframe, the Interconnection Request shall continue to be evaluated under the section 3 Study Process unless it is withdrawn by the Interconnection Customer.
- 2.4.2 The Interconnection Customer may specify the order in which the Transmission Provider will complete the screens in section 2.4.4.
- 2.4.3 The Interconnection Customer shall be responsible for the Transmission Provider's actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within 20 Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the Transmission Provider will return such excess within 20 Business Days of the invoice without interest.
- 2.4.4 Within 30 Business Days following receipt of the deposit for a supplemental review, the Transmission Provider shall (1) perform a supplemental review using the screens set forth below; (2) notify in writing the Interconnection Customer of the results; and (3) include with the notification copies of the analysis and data underlying the Transmission Provider's determinations under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, the Transmission Provider shall notify the Interconnection Customer following the failure of any of the screens, or if it is unable to perform the screen in section 2.4.4.1, within two Business Days of making such

determination to obtain the Interconnection Customer's permission to: (1) continue evaluating the proposed interconnection under this section 2.4.4; (2) terminate the supplemental review and continue evaluating the Small Generating Facility under section 3; or (3) terminate the supplemental review upon withdrawal of the Interconnection Request by the Interconnection Customer.

2.4.4.1 Minimum Load Screen: Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed Small Generating Facility) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate Generating Facility capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed Small Generating Facility. If minimum load data is not available, or cannot be calculated, estimated or determined, the Transmission Provider shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under section 2.4.4.

2.4.4.1.1 The type of generation used by the proposed Small Generating Facility will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of screen 2.4.4.1. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum load (i.e. 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.

2.4.4.1.2 When this screen is being applied to a Small Generating Facility that serves some station service load, only the net injection into the Transmission

Provider's electric system will be considered as part of the aggregate generation.

2.4.4.1.3 Transmission Provider will not consider as part of the aggregate generation for purposes of this screen generating facility capacity known to be already reflected in the minimum load data.

2.4.4.2 Voltage and Power Quality Screen: In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuation is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.

2.4.4.3 Safety and Reliability Screen: The location of the proposed Small Generating Facility and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the Study Process. The Transmission Provider shall give due consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.

2.4.4.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).

2.4.4.3.2 Whether the loading along the line section is uniform or even.

2.4.4.3.3 Whether the proposed Small Generating Facility is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of

Interconnection is a Mainline rated for normal and emergency ampacity.

2.4.4.3.4 Whether the proposed Small Generating Facility incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

2.4.4.3.5 Whether operational flexibility is reduced by the proposed Small Generating Facility, such that transfer of the line section(s) of the Small Generating Facility to a neighboring distribution circuit/substation may trigger overloads or voltage issues.

2.4.4.3.6 Whether the proposed Small Generating Facility employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.

2.4.5 If the proposed interconnection passes the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above, the Interconnection Request shall be approved and the Transmission Provider will provide the Interconnection Customer with an executable interconnection agreement within the timeframes established in sections 2.4.5.1 and 2.4.5.2 below. If the proposed interconnection fails any of the supplemental review screens and the Interconnection Customer does not withdraw its Interconnection Request, it shall continue to be evaluated under the section 3 Study Process consistent with section 2.4.5.3 below.

2.4.5.1 If the proposed interconnection passes the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above and does not require construction of facilities by the Transmission Provider on its own system, the interconnection agreement shall be provided within ten Business Days after the notification of the supplemental review results.

- 2.4.5.2 If interconnection facilities or minor modifications to the Transmission Provider's system are required for the proposed interconnection to pass the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above, and the Interconnection Customer agrees to pay for the modifications to the Transmission Provider's electric system, the interconnection agreement, along with a non-binding good faith estimate for the interconnection facilities and/or minor modifications, shall be provided to the Interconnection Customer within 15 Business Days after receiving written notification of the supplemental review results.
- 2.4.5.3 If the proposed interconnection would require more than interconnection facilities or minor modifications to the Transmission Provider's system to pass the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above, the Transmission Provider shall notify the Interconnection Customer, at the same time it notifies the Interconnection Customer with the supplemental review results, that the Interconnection Request shall be evaluated under the section 3 Study Process unless the Interconnection Customer withdraws its Small Generating Facility.

### **Section 3. Study Process**

#### **3.1 Applicability**

The Study Process shall be used by an Interconnection Customer proposing to interconnect its Small Generating Facility with the Transmission Provider's Transmission System or Distribution System if the Small Generating Facility (1) is larger than 2 MW but no larger than 20 MW, (2) is not certified, or (3) is certified but did not pass the Fast Track Process or the 10 kW Inverter Process.

#### **3.2 Scoping Meeting**

3.2.1 A scoping meeting will be held within ten Business Days after the Interconnection Request is deemed complete, or as otherwise mutually agreed to by the Parties. The Transmission Provider and the 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 the 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, the Transmission Provider shall provide the Interconnection Customer, as soon as possible, but not later than five Business Days after the scoping meeting, a feasibility study agreement (Attachment 6) 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, the Transmission Provider shall provide the Interconnection Customer, no later than five Business Days after the scoping meeting, a system impact study agreement (Attachment 7) including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.

### 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 lesser of 50 percent of the good faith estimated feasibility study costs or earnest money of \$1,000 may be required from the Interconnection Customer.

3.3.3 The scope of and cost responsibilities for the feasibility study are described in the attached feasibility study agreement (Attachment 6).

3.3.4 If the feasibility study shows no potential for adverse system impacts, the Transmission Provider shall send the 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, the Transmission Provider shall send the Interconnection Customer an executable interconnection agreement within five Business Days.

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. The Transmission Provider shall send the 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, the Transmission Provider shall send the 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, the Transmission Provider shall send the 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, the Transmission Provider shall send the Interconnection Customer either a facilities study agreement (Attachment 8), including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or an executable interconnection agreement, as applicable.

- 3.4.6 In order to remain under consideration for interconnection, the 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 may be required from the Interconnection Customer.
- 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 – the 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, a system impact study report shall be prepared and transmitted to the Interconnection Customer along with a facilities study agreement within five Business Days, 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 the Interconnection Customer within the same timeframe.
- 3.5.2 In order to remain under consideration for interconnection, or, as appropriate, in the Transmission Provider's interconnection queue, the 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).
- 3.5.4 Design for any required Interconnection Facilities and/or Upgrades shall be performed under the facilities study agreement. The Transmission Provider may contract with consultants to perform activities required under the facilities study agreement. The Interconnection Customer and the Transmission Provider may

agree to allow the 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 the 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, the Transmission Provider shall make sufficient information available to the Interconnection Customer in accordance with confidentiality and critical infrastructure requirements to permit the 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 may be required from the Interconnection Customer.
- 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 the Interconnection Customer to pay for Interconnection Facilities and Upgrades identified in the facilities study, the Transmission Provider shall provide the Interconnection Customer an executable interconnection agreement within five Business Days.

#### **Section 4. Provisions that Apply to All Interconnection Requests**

##### 4.1 Reasonable Efforts

The Transmission Provider shall make reasonable efforts to meet all time frames provided in these procedures unless the Transmission Provider and the Interconnection Customer agree to a different schedule. If the Transmission Provider cannot meet a deadline provided herein, it shall notify the 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, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

- 4.2.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, 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 the Interconnection Customer's expense in accordance with Federal Energy Regulatory Commission, state, or local regulatory requirements or the Transmission Provider's specifications.

#### 4.4 Commissioning

Commissioning tests of the Interconnection Customer's installed equipment shall be performed pursuant to applicable codes and standards. The 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 the 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 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.

4.5.2.2 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.

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

The Transmission Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this document. The 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 the Transmission Provider, its subsidiaries or affiliates, or others.

#### 4.7 Record Retention

The 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

After receiving an interconnection agreement from the Transmission Provider, the Interconnection Customer shall have 30 Business Days or another mutually agreeable timeframe to sign and return the interconnection agreement or request that the Transmission Provider file an unexecuted interconnection agreement with the Federal Energy Regulatory Commission. If the Interconnection Customer does not sign the interconnection agreement, or ask that it be filed unexecuted by the Transmission Provider within 30 Business Days, 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

The 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. The Transmission Provider will include such Affected System operators in all meetings held with the Interconnection Customer as required by these procedures. The Interconnection Customer will cooperate with the 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 the 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 the 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 capacity that the Small Generating Facility is capable of injecting into the Transmission Provider's electric system. However, if the maximum capacity that the Small Generating Facility is capable of injecting into the Transmission Provider's electric system is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the Transmission Provider's agreement, with such agreement not to be unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not adversely affect the safety and reliability of the Transmission Provider's system. If the Transmission Provider does not so agree, then the Interconnection Request must be withdrawn or revised to specify the maximum capacity that the Small Generating Facility is capable of injecting into the Transmission Provider's electric system without such limitations. Furthermore, nothing in this section shall prevent a Transmission Provider from considering an output higher than the limited output, if appropriate, when evaluating system protection impacts.

### 5. EIM Requirements

- 5.1 The Interconnection Customer shall have a continuing duty to comply with Attachment P of this Tariff, as applicable.



## **Attachment 1**

### **Glossary of Terms**

**10 kW Inverter Process** – The procedure for evaluating an Interconnection Request for a certified inverter-based Small Generating Facility no larger than 10 kW that uses the section 2 screens. The application process uses an all-in-one document that includes a simplified Interconnection Request, simplified procedures, and a brief set of terms and conditions. See SGIP Attachment 5.

**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.

**Fast Track Process** – The procedure for evaluating an Interconnection Request for a certified Small Generating Facility that meets the eligibility requirements of section 2.1 and includes the section 2 screens, customer options meeting, and optional supplemental review.

**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 act 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 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 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** – An Interconnection Service that allows the Interconnection Customer to integrate its Generating Facility with the Transmission Provider's 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** – 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.

**Small Generating Facility** – The 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.

**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 the Transmission Provider.

**Processing Fee or Deposit:**

If the Interconnection Request is submitted under the Fast Track Process, the non-refundable processing fee is \$500.

If the Interconnection Request is submitted under the Study Process, whether a new submission or an Interconnection Request that did not pass the Fast Track Process, the Interconnection Customer shall submit to the Transmission Provider a deposit not to exceed \$1,000 towards the cost of the feasibility study.

**Interconnection Customer Information**

Legal Name of the Interconnection Customer (or, if an individual, individual's name)

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

Contact Person: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Facility Location (if different from above): \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Alternative Contact Information (if different from the Interconnection Customer)

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

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

Address: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Application is for: \_\_\_\_\_ New Small Generating 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 the Interconnection Customer? Yes \_\_\_ No \_\_\_

To Supply Power to Others? Yes \_\_\_ No \_\_\_

For installations at locations with existing electric service to which the proposed Small Generating Facility will interconnect, provide:

\_\_\_\_\_  
(Local Electric Service Provider\*)

\_\_\_\_\_  
(Existing Account Number\*)

[\*To be provided by the Interconnection Customer if the local electric service provider is different from the Transmission Provider]

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

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

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Requested Point of Interconnection: \_\_\_\_\_

\_\_\_\_\_

Interconnection Customer's Requested In-Service Date: \_\_\_\_\_

**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 Turb  
 Microturbine  PV  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

List components of the Small Generating Facility equipment package that are currently certified:

	Equipment Type	Certifying Entity
1.	_____	_____
2.	_____	_____

3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Is the prime mover compatible with the certified protective relay package? \_\_\_ Yes \_\_\_ No

Generator (or solar 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<sup>2</sup>t or K (Heating Time Constant): \_\_\_\_\_

Rotor Resistance,  $R_r$ : \_\_\_\_\_

Stator Resistance,  $R_s$ : \_\_\_\_\_

Stator Reactance,  $X_s$ : \_\_\_\_\_

Rotor Reactance,  $X_r$ : \_\_\_\_\_

Magnetizing Reactance,  $X_m$ : \_\_\_\_\_

Short Circuit Reactance,  $X_d''$ : \_\_\_\_\_

Exciting Current: \_\_\_\_\_

Temperature Rise: \_\_\_\_\_

Frame Size: \_\_\_\_\_

Design Letter: \_\_\_\_\_

Reactive Power Required In Vars (No Load): \_\_\_\_\_

Reactive Power Required In Vars (Full Load): \_\_\_\_\_

Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on kVA Base

Note: Please contact the Transmission Provider prior to submitting the Interconnection Request to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.



**Interconnection Facilities Information**

Will a transformer be used between the generator and the point of common coupling?

Yes  No

Will the transformer be provided by the Interconnection Customer?  Yes  No

Transformer Data (If Applicable, for Interconnection Customer-Owned Transformer):

Is the transformer:  single phase  three phase? Size: \_\_\_\_\_ kVA

Transformer Impedance: \_\_\_\_\_ % on \_\_\_\_\_ kVA Base

If Three Phase:

Transformer Primary: \_\_\_\_\_ Volts  Delta  Wye  Wye Grounded

Transformer Secondary: \_\_\_\_\_ Volts  Delta  Wye  Wye Grounded

Transformer Tertiary: \_\_\_\_\_ Volts  Delta  Wye  Wye Grounded

Transformer Fuse Data (If Applicable, for Interconnection Customer-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Size: \_\_\_\_\_ Speed: \_\_\_\_\_

Interconnecting Circuit Breaker (if applicable):

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_

Load Rating (Amps): \_\_\_\_\_ Interrupting Rating (Amps): \_\_\_\_\_ Trip Speed (Cycles): \_\_\_\_\_

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

	Setpoint Function	Minimum	Maximum
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____	Type: _____	Style/Catalog No.: _____	Proposed Setting: _____
Manufacturer: _____	Type: _____	Style/Catalog No.: _____	Proposed Setting: _____
Manufacturer: _____	Type: _____	Style/Catalog No.: _____	Proposed Setting: _____
Manufacturer: _____	Type: _____	Style/Catalog No.: _____	Proposed Setting: _____
Manufacturer: _____	Type: _____	Style/Catalog No.: _____	Proposed Setting: _____

Current Transformer Data (If Applicable):

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_\_ Proposed Ratio Connection: \_\_\_\_\_

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_\_ Proposed Ratio Connection: \_\_\_\_\_

Potential Transformer Data (If Applicable):

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_\_ Proposed Ratio Connection: \_\_\_\_\_

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_\_ Proposed Ratio Connection: \_\_\_\_\_

**General Information**

Enclose copy of site electrical one-line diagram showing the configuration of all Small Generating Facility equipment, current and potential circuits, and protection and control schemes. This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Small Generating Facility is larger than 50 kW. 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 the Interconnection Customer's address) \_\_\_\_\_

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Available Documentation Enclosed? \_\_\_ Yes \_\_\_ No

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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**

## **Certification Codes and Standards**

IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2002), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms

NEMA MG 1-1998, Motors and Small Resources, Revision 3

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

## **Attachment 4**

### **Certification of Small Generator Equipment Packages**

- 1.0 Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in SGIP Attachment 3, (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 2.0 The Interconnection Customer must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.
- 4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- 5.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.

6.0 An equipment package does not include equipment provided by the utility.

7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of these small generator interconnection procedures shall be considered certified under these procedures for use in that state.

**Attachment 5**  
**Application, Procedures, and Terms and Conditions for Interconnecting**  
a Certified Inverter-Based Small Generating Facility No  
**Larger than 10 kW ("10 kW Inverter Process")**

- 1.0 The Interconnection Customer ("Customer") completes the Interconnection Request ("Application") and submits it to the Transmission Provider ("Company").
- 2.0 The Company acknowledges to the Customer receipt of the Application within three Business Days of receipt.
- 3.0 The Company evaluates the Application for completeness and notifies the Customer within ten Business Days of receipt that the Application is or is not complete and, if not, advises what material is missing.
- 4.0 The Company verifies that the Small Generating Facility can be interconnected safely and reliably using the screens contained in the Fast Track Process in the Small Generator Interconnection Procedures (SGIP). The Company has 15 Business Days to complete this process. Unless the Company determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the Company approves the Application and returns it to the Customer. Note to Customer: Please check with the Company before submitting the Application if disconnection equipment is required.
- 5.0 After installation, the Customer returns the Certificate of Completion to the Company. Prior to parallel operation, the Company may inspect the Small Generating Facility for compliance with standards which may include a witness test, and may schedule appropriate metering replacement, if necessary.
- 6.0 The Company notifies the Customer in writing that interconnection of the Small Generating Facility is authorized. If the witness test is not satisfactory, the Company has the right to disconnect the Small Generating Facility. The Customer has no right to operate in parallel until a witness test has been performed, or previously waived on the Application. The Company is obligated to complete this witness test within ten Business Days of the receipt of the Certificate of Completion. If the Company does not inspect within ten Business Days or by mutual agreement of the Parties, the witness test is deemed waived.
- 7.0 Contact Information – The Customer must provide the contact information for the legal applicant (i.e., the Interconnection Customer). If another entity is responsible for

interfacing with the Company, that contact information must be provided on the Application.

- 8.0 Ownership Information – Enter the legal names of the owner(s) of the Small Generating Facility. Include the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either.
- 9.0 UL1741 Listed – This standard ("Inverters, Converters, and Controllers for Use in Independent Power Systems") addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL1741. This "listing" is then marked on the equipment and supporting documentation.



**Application for Interconnecting a Certified Inverter-Based Small Generating Facility No  
Larger than 10kW**

This Application 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. Additional information to evaluate the Application may be required.

Processing Fee

A non-refundable processing fee of \$100 must accompany this Application.

Interconnection Customer

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

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Contact (if different from Interconnection Customer)

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

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Owner of the facility (include % ownership by any electric utility): \_\_\_\_\_

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**Small Generating Facility Information**

Location (if different from above): \_\_\_\_\_

Electric Service Company: \_\_\_\_\_

Account Number: \_\_\_\_\_

Inverter Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Nameplate Rating: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA) \_\_\_\_\_ (AC Volts)

Single Phase \_\_\_\_\_ Three Phase \_\_\_\_\_

System Design Capacity: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA)

Prime Mover: \_\_\_ Photovoltaic \_\_\_ Reciprocating Engine \_\_\_ Fuel Cell  
\_\_\_ Turbine \_\_\_ Other (describe) \_\_\_\_\_

Energy Source: \_\_\_ Solar \_\_\_ Wind \_\_\_ Hydro \_\_\_ Diesel \_\_\_ Natural Gas  
\_\_\_ Fuel Oil \_\_\_ Other (describe) \_\_\_\_\_

Is the equipment UL1741 Listed? \_\_\_ Yes \_\_\_ No

If Yes, attach manufacturer's cut-sheet showing UL1741 listing

Estimated Installation Date: \_\_\_\_\_ Estimated In-Service Date: \_\_\_\_\_

The 10 kW Inverter Process is available only for inverter-based Small Generating Facilities no larger than 10 kW that meet the codes, standards, and certification requirements of Attachments 3 and 4 of the Small Generator Interconnection Procedures (SGIP), or the Transmission Provider has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

List components of the Small Generating Facility equipment package that are currently certified:

	Equipment Type	Certifying Entity
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

Interconnection Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Small

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Generating Facility No Larger than 10kW and return the Certificate of Completion when the Small Generating Facility has been installed.

Signed: \_\_\_\_\_  
Title: \_\_\_\_\_ Date: \_\_\_\_\_

.....  
Contingent Approval to Interconnect the Small Generating Facility

(For Company use only)

Interconnection of the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW and return of the Certificate of Completion.

Company Signature: \_\_\_\_\_

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

Application ID number: \_\_\_\_\_

Company waives inspection/witness test? Yes\_\_\_No\_\_\_

### Small Generating Facility Certificate of Completion

Is the Small Generating Facility owner-installed? Yes \_\_\_\_\_ No \_\_\_\_\_

Interconnection Customer: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

Location of the Small Generating Facility (if different from above): \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Electrician:

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

Address: \_\_\_\_\_

Location of the Small Generating Facility (if different from above): \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

License number: \_\_\_\_\_

Date Approval to Install Facility granted by the Company: \_\_\_\_\_

Application ID number: \_\_\_\_\_

Inspection:

The Small Generating Facility has been installed and inspected in compliance with the local building/electrical code of: \_\_\_\_\_

Signed (Local electrical wiring inspector, or attach signed electrical inspection):  
\_\_\_\_\_

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

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

As a condition of interconnection, you are required to send/fax a copy of this form along with a copy of the signed electrical permit to (insert Company information below):

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

Company: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Fax: \_\_\_\_\_

.....  
Approval to Energize the Small Generating Facility (For Company use only)

Energizing the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW

Company Signature: \_\_\_\_\_

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

## **Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW**

### **1.0 Construction of the Facility**

The Interconnection Customer (the "Customer") may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when the Transmission Provider (the "Company") approves the Interconnection Request (the "Application") and returns it to the Customer.

### **2.0 Interconnection and Operation**

The Customer may operate Small Generating Facility and interconnect with the Company's electric system once all of the following have occurred:

- 2.1 Upon completing construction, the Customer will cause the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- 2.2 The Customer returns the Certificate of Completion to the Company, and
- 2.3 The Company has either:
  - 2.3.1 Completed its inspection of the Small Generating Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. All inspections must be conducted by the Company, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Company shall provide a written statement that the Small Generating Facility has passed inspection or shall notify the Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place; or
  - 2.3.2 If the Company does not schedule an inspection of the Small Generating Facility within ten business days after receiving the Certificate of Completion, the witness test is deemed waived (unless the Parties agree otherwise); or
  - 2.3.3 The Company waives the right to inspect the Small Generating Facility.
- 2.4 The Company has the right to disconnect the Small Generating Facility in the event of improper installation or failure to return the Certificate of Completion.

2.5 Revenue quality metering equipment must be installed and tested in accordance with applicable ANSI standards.

### **3.0 Safe Operations and Maintenance**

The Customer shall be fully responsible to operate, maintain, and repair the Small Generating Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

### **4.0 Access**

The Company shall have access to the disconnect switch (if the disconnect switch is required) and metering equipment of the Small Generating Facility at all times. The Company shall provide reasonable notice to the Customer when possible prior to using its right of access.

### **5.0 Disconnection**

The Company may temporarily disconnect the Small Generating Facility upon the following conditions:

- 5.1 For scheduled outages upon reasonable notice.
- 5.2 For unscheduled outages or emergency conditions.
- 5.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.
- 5.4 The Company shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

### **6.0 Indemnification**

The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

### **7.0 Insurance**

The Parties agree to follow all applicable insurance requirements imposed by the state in which the Point of Interconnection is located. All insurance policies must be maintained with insurers authorized to do business in that state.

### **8.0 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, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0.

## **9.0 Termination**

The agreement to operate in parallel may be terminated under the following conditions:

### **9.1 By the Customer**

By providing written notice to the Company.

### **9.2 By the Company**

If the Small Generating Facility fails to operate for any consecutive 12 month period or the Customer fails to remedy a violation of these Terms and Conditions.

### **9.3 Permanent Disconnection**

In the event this Agreement is terminated, the Company shall have the right to disconnect its facilities or direct the Customer to disconnect its Small Generating Facility.

### **9.4 Survival Rights**

This Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.

## **10.0 Assignment/Transfer of Ownership of the Facility**

This Agreement shall survive the transfer of ownership of the Small Generating Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the Company.



**Attachment 6**  
**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  
\_\_\_\_\_, a \_\_\_\_\_  
existing under the laws of the State of \_\_\_\_\_,  
("Transmission Provider"). Interconnection Customer and Transmission Provider each may be  
referred to as a "Party," or collectively as the "Parties."

**RECITALS**

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

**WHEREAS**, Interconnection Customer desires to interconnect the Small Generating Facility  
with the Transmission Provider's Transmission System; and

**WHEREAS**, Interconnection Customer has requested the Transmission Provider to perform a  
feasibility study to assess the feasibility of interconnecting the proposed Small Generating  
Facility with the Transmission Provider's Transmission System, and of any Affected Systems;

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have  
the meanings indicated or the meanings specified in the standard Small Generator  
Interconnection Procedures.
- 2.0 The Interconnection Customer elects and the Transmission Provider shall cause to be  
performed an interconnection feasibility study consistent the standard Small Generator  
Interconnection Procedures in accordance with the 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 the Interconnection Customer in the Interconnection Request, as may be modified as the result of the scoping meeting. The Transmission Provider reserves the right to request additional technical information from the 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 the 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, the Transmission Provider shall rely, to the extent reasonably practicable, on existing studies of recent vintage. The Interconnection Customer shall not be charged for such existing studies; however, the 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 the 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 the Interconnection Customer and at the Interconnection Customer's cost.
- 9.0 A deposit of the lesser of 50 percent of good faith estimated feasibility study costs or earnest money of \$1,000 may be required from the Interconnection Customer.
- 10.0 Once the feasibility study is completed, a feasibility study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the feasibility study must be completed and the feasibility study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct a feasibility study.
- 11.0 Any study fees shall be based on the Transmission Provider's actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.
- 12.0 The 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, the Transmission Provider shall 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 the laws of the state of \_\_\_\_\_ (where the Point of Interconnection is located), without regard to its conflicts of law principles. 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 the Interconnection Customer's legal rights to obtain an interconnection from the 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 the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the 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.

21.0 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Transmission Provider]

[Insert name of Interconnection Customer]

\_\_\_\_\_

Signed: \_\_\_\_\_ Signed: \_\_\_\_\_

~~Portland General Electric Company~~

~~FERC Electric Tariff~~

~~Fourth Revised Volume No. 8~~

Name (Printed):

Name (Printed):

\_\_\_\_\_

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

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

**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 the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and the Transmission Provider.

**Attachment 7**  
**System Impact Study Agreement**

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

**RECITALS**

**WHEREAS**, the 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 the Interconnection Customer  
on \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Small Generating Facility  
with the Transmission Provider's Transmission System;

**WHEREAS**, the Transmission Provider has completed a feasibility study and provided the  
results of said study to the Interconnection Customer (This recital to be omitted if the Parties  
have agreed to forego the feasibility study.); and

**WHEREAS**, the Interconnection Customer has requested the Transmission Provider to perform  
a system impact study(s) to assess the impact of interconnecting the Small Generating Facility  
with the Transmission Provider's Transmission System, and of any Affected Systems;

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have  
the meanings indicated or the meanings specified in the standard Small Generator  
Interconnection Procedures.



- 2.0 The Interconnection Customer elects and the Transmission Provider shall cause to be performed a system impact study(s) consistent with the standard Small Generator Interconnection Procedures in accordance with the 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. The Transmission Provider reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the system impact study. If the 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 the Transmission Provider has 20 additional Business Days to complete a system impact study requiring review by Affected Systems.

- 8.0 If the 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 the 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 the Transmission Provider's electric system.
- 9.0 A distribution system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within 30 Business Days after this Agreement is signed by the Parties. A transmission system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within 45 Business Days after this Agreement is signed by the Parties, or in accordance with the 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 one half the good faith estimated cost of a transmission system impact study may be required from the Interconnection Customer.
- 11.0 Any study fees shall be based on the Transmission Provider's actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.
- 12.0 The 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, the Transmission Provider shall 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 the laws of the state of \_\_\_\_\_ (where the Point of Interconnection is located), without regard to its conflicts of law principles. 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 the Interconnection Customer's legal rights to obtain an interconnection from the 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 the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the 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.

## 21.0 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and

FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**IN WITNESS THEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Transmission Provider]

[Insert name of Interconnection Customer]

\_\_\_\_\_

\_\_\_\_\_

Signed: \_\_\_\_\_

Signed: \_\_\_\_\_

Name (Printed):

Name (Printed):

\_\_\_\_\_

\_\_\_\_\_

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

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

**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 the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and the Transmission Provider.

**Attachment 8**  
**Facilities Study Agreement**

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

**RECITALS**

**WHEREAS**, the 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 the Interconnection Customer  
on \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Small Generating Facility  
with the Transmission Provider's Transmission System;

**WHEREAS**, the Transmission Provider has completed a system impact study and provided the  
results of said study to the Interconnection Customer; and

**WHEREAS**, the Interconnection Customer has requested the 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 the Transmission Provider's Transmission System.

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have  
the meanings indicated or the meanings specified in the standard Small Generator  
Interconnection Procedures.
- 2.0 The Interconnection Customer elects and the Transmission Provider shall cause a  
facilities study consistent with the standard Small Generator Interconnection Procedures  
to be performed in accordance with the 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 estimate 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 the 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 The 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 may be required from the Interconnection Customer.
- 7.0 In cases where Upgrades are required, the facilities study must be completed 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, the facilities study must be completed within 30 Business Days.
- 8.0 Once the facilities study is completed, a draft facilities study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the facilities study must be completed and the draft facilities study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct a facilities study.
- 9.0 Interconnection Customer may, within 30 Calendar Days after receipt of the draft report, provide written comments to Transmission Provider, which Transmission Provider shall include in the final report. Transmission Provider shall issue the final Interconnection Facilities Study report within 15 Business Days of receiving Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. Transmission Provider may reasonably extend such fifteen-day period upon notice to Interconnection Customer if Interconnection Customer's comments require Transmission Provider to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities Report. Upon



request, Transmission Provider shall provide Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the Interconnection Facilities Study, subject to confidentiality arrangements consistent with Section 4.5 of the standard Small Generator Interconnection Procedures.

- 10.0 Within ten Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, Transmission Provider and Interconnection Customer shall meet to discuss the results of the Interconnection Facilities Study.
- 11.0 Any study fees shall be based on the Transmission Provider's actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.
- 12.0 The 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, the Transmission Provider shall 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 the laws of the state of \_\_\_\_\_ (where the Point of Interconnection is located), without regard to its conflicts of law principles. 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 the Interconnection Customer's legal rights to obtain an interconnection from the 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 the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the 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.

21.0 Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Transmission Provider]

[Insert name of Interconnection Customer]

\_\_\_\_\_

Signed \_\_\_\_\_ Signed \_\_\_\_\_

Name (Printed): \_\_\_\_\_ Name (Printed): \_\_\_\_\_

\_\_\_\_\_

Title \_\_\_\_\_ Title \_\_\_\_\_

**Attachment A to  
Facilities Study Agreement**

**Data to Be Provided by the 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?

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

**ATTACHMENT M-1**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**

**SMALL GENERATOR  
INTERCONNECTION AGREEMENT**

**(For Generating Facilities No Larger Than 20 MW)**

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

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- 1.4 Limitations
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Attachment 1 – Glossary of Terms

Attachment 2 – Description and Costs of the Small Generating Facility, 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 the Transmission Provider's Transmission System and Affected Systems Needed to Support the Interconnection Customer's Needs

Attachment 6 – Transmission Provider's Description of its Upgrades and Best Estimate of Upgrade Costs

This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by \_\_\_\_\_ ("Transmission Provider"), and \_\_\_\_\_ ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

**Transmission Provider Information**

Transmission Provider: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

**Interconnection Customer Information**

Interconnection Customer: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Interconnection Customer Application No: \_\_\_\_\_

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

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

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Attachment 5.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Transmission Provider's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable Transmission Provider.
- 1.4 Nothing in this Agreement is intended to affect any other agreement between the Transmission Provider and the Interconnection Customer.

## 1.5 Responsibilities of the Parties

- 1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.
- 1.5.2 The 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.
- 1.5.3 The Transmission Provider shall construct, operate, and maintain its Transmission System and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.
- 1.5.4 The 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. The 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 the Transmission Provider and any Affected Systems.
- 1.5.5 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. The Transmission Provider and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the 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.
- 1.5.6 The Transmission Provider shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for

a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition, as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Provider's automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the 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 the Transmission Provider's Transmission System and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the 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. The 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 Power Factor Design Criteria

1.8.1.1 Synchronous Generation. The 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 the Transmission Provider has established different requirements that apply to all similarly situated synchronous generators in the control area on a comparable basis.

1.8.1.2 Non-Synchronous Generation. The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area on a comparable basis. This power factor range standard shall be dynamic and can be met 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, or a combination of the two. This requirement shall only apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

1.8.2 The Transmission Provider is required to pay the Interconnection Customer for reactive power that the Interconnection Customer provides or absorbs from the Small Generating Facility when the Transmission Provider requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay the Interconnection Customer.

1.8.3 Payments shall be in accordance with the 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 the 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 the 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 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the 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. The Transmission Provider may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Transmission Provider a written test report when such testing and inspection is completed.
- 2.1.2 The Transmission Provider shall provide the Interconnection Customer written acknowledgment that it has received the 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 the 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 the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### 2.2 Authorization Required Prior to Parallel Operation

- 2.2.1 The Transmission Provider shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Transmission Provider shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Transmission Provider shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Transmission Provider's Transmission System without prior written authorization of the Transmission Provider. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the 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, the Transmission Provider may send a qualified person to the premises of the 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, the Interconnection Customer shall notify the 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, the Transmission Provider shall have access to the 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 subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Transmission Provider shall promptly file this Agreement with the FERC upon execution, if required.

#### 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 the 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, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Transmission Provider 20 Business Days written notice.

- 3.3.2 Either Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the 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.
- 3.3.4 The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 3.3.5 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 the 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, the 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 the 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 the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the Transmission Provider may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Provider shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the Transmission Provider promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the 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

The Transmission Provider may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Provider's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Provider's Transmission System. The Transmission Provider shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Provider shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages

During any forced outage, the Transmission Provider may suspend interconnection service to effect immediate repairs on the Transmission Provider's Transmission System. The Transmission Provider shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Transmission Provider shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects

The Transmission Provider shall notify the 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 the Transmission Provider's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Transmission Provider may disconnect the Small Generating Facility. The Transmission Provider shall provide the 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

The Interconnection Customer must receive written authorization from the 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 the Interconnection Customer makes such modification without the 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 the 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 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The 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 the Interconnection Customer, such other entities, and the Transmission Provider.

4.1.2 The 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 the Transmission Provider's Interconnection Facilities.

##### **4.2 Distribution Upgrades**

The Transmission Provider shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the 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**

The Transmission Provider or the Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Transmission Provider and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Transmission Provider elects to pay for Network

Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.2.1 Repayment of Amounts Advanced for Network Upgrades

The Interconnection Customer shall be entitled to a cash repayment, equal to the total amount paid to the Transmission Provider and Affected System operator, if any, for Network Upgrades, including any tax gross-up or other tax-related payments associated with the Network Upgrades, and not otherwise refunded to the Interconnection Customer, to be paid to the Interconnection Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Transmission Provider's Tariff and Affected System's Tariff for transmission services with respect to the Small Generating Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment pursuant to this subparagraph. The Interconnection Customer may assign such repayment rights to any person.

5.2.1.1 Notwithstanding the foregoing, the Interconnection Customer, the Transmission Provider, and any applicable Affected System operators may adopt any alternative payment schedule that is mutually agreeable so long as the 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 the Interconnection Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that the Transmission Provider or any applicable Affected System operators will continue to provide payments to the 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, the Transmission Provider and Affected System operator shall at that time reimburse the Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the 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 the Transmission Provider provides, under this Agreement, for the repayment of amounts advanced to any applicable Affected System operators for Network Upgrades, the 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 the 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 the 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 The Transmission Provider shall bill the 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. The 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 the Transmission Provider's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Transmission Provider for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Provider shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Provider within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Transmission Provider shall refund to the 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: (1) 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 the Transmission Provider's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Transmission Provider's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the 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 the Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from the 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 the 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 the Interconnection Customer promptly notifies the Transmission Provider of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Provider, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the 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 the 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

- 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, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of

such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

- 7.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.
- 7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

#### 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 The 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. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a 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 the Transmission Provider, except that the Interconnection Customer shall show proof of insurance to the 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 Transmission Provider agrees to maintain general liability insurance or self-insurance consistent with the Transmission Provider's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Provider's liabilities undertaken pursuant to this Agreement.
- 8.3 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 the 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 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, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.
- 10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, 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 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.
- 11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **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 the laws of the state of \_\_\_\_\_ (where the Point of Interconnection is located), without regard to its conflicts of law principles. 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.

## 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties, or under article 12.12 of this Agreement.

## 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 the Interconnection Customer's legal rights to obtain an interconnection from the 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 notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 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 the Transmission Provider be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the 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

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

## **Article 13. Notices**

### 13.1 General

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

If to the Interconnection Customer:

Interconnection Customer: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

If to the Transmission Provider:  
Transmission Provider: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

### 13.2 Billing and Payment

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

Interconnection Customer: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Transmission Provider: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

### 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:

If to the Interconnection Customer:

Interconnection Customer: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

If to the Transmission Provider:

Transmission Provider: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

13.4 Designated Operating Representative

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

Interconnection Customer's Operating Representative:

Interconnection Customer: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Transmission Provider's Operating Representative:

Transmission Provider: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

13.5 Changes to the Notice Information

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

**Article 14. Signatures**

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

For the Transmission Provider

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

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

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

For the Interconnection Customer

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

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

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



## ATTACHMENT 1 TO SGIA

### 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.

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**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 the 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.

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**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 and/or storage for later injection of electricity identified in the Interconnection Request, but 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 filed with the FERC, and 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 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 TO SGIA**

### **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 the Interconnection Customer, the Transmission Provider, or the Transmission Owner. The 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 TO SGIA**

**ONE-LINE DIAGRAM DEPICTING THE SMALL GENERATING FACILITY,  
INTERCONNECTION FACILITIES, METERING EQUIPMENT, AND UPGRADES**

**ATTACHMENT 4 TO SGIA**

**MILESTONES**

In-Service Date: \_\_\_\_\_

Critical milestones and responsibility as agreed to by the Parties:

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

Agreed to by:

For the Transmission Provider \_\_\_\_\_ Date \_\_\_\_\_

For the Transmission Owner (If Applicable) \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

## **ATTACHMENT 5 TO SGIA**

### **ADDITIONAL OPERATING REQUIREMENTS FOR THE TRANSMISSION PROVIDER'S TRANSMISSION SYSTEM AND AFFECTED SYSTEMS NEEDED TO SUPPORT THE INTERCONNECTION CUSTOMER'S NEEDS**

The Transmission Provider shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Provider's Transmission System.

**ATTACHMENT 6 TO SGIA**

**TRANSMISSION PROVIDER'S DESCRIPTION OF ITS UPGRADES  
AND BEST ESTIMATE OF UPGRADE COSTS**

The 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. The Transmission Provider shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.



ATTACHMENT N

**Retail Network Integration Transmission Service  
Provided For Oregon Retail Direct Access**

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1. **Oregon Retail Direct Access:** The Transmission Provider shall provide Retail Direct Access in the retail service territory of Portland General Electric pursuant to the rules and regulations pertaining to such participation as are provided by the Public Utility Commission of Oregon in accordance with ORS 757.600 through ORS 757.691.
2. **Nature of Retail Network Integration Transmission Service:** Retail Network Integration Transmission Service is a form of Network Integration Transmission Service and will be provided pursuant to the terms and conditions of Part III of this Tariff.
3. **Eligibility:** Any ESS certified by the Oregon Public Utility Commission pursuant to ORS 75.649 and any Retail End-User must purchase Retail Network Integration Transmission Service from the Transmission Provider pursuant to the procedures and terms and conditions in Part III of the Tariff and this Attachment N.
4. **Retail Network Integration Transmission Service Monthly Charge:** The Charges shall be equal to the product of the applicable Retail Network Integration Transmission Service Rates in Section 5 and the sum of the individual monthly Metered Demands for an ESS's Retail End-Users (as measured at the Retail End-User meters). The Metered Demand for each individual Retail End-User shall be based on the average maximum demand over a 30 minute period for each month. The Schedule 4-R, Imbalance Service Charge shall be separately applied and in addition to charges set out in this Attachment N. In addition, a Transmission Customer may incur other charges for additional Transmission and Ancillary Service separately purchased under the Tariff.
5. **Retail Network Integration Transmission Service Monthly Rates:** The rates as set forth below shall be applied as set out in Section 4. The rates as set out in this Section shall remain in effect until amended by the Transmission Provider or modified by the Federal Energy Regulatory Commission.
  - a.) Retail Network Integration Transmission Service Rate:
    - 1) \$0.38 /kW of Metered Demand per month.
  - b.) Ancillary Services Rates for Retail Direct Access:
    - 1) Rate for Schedule 1, Scheduling, System Control and Dispatch Service:
      - i) \$0.01 per kW of Metered Demand per month.
    - 2) Rate for Schedule 2, Reactive Supply and Voltage Control from Generation Sources Service
      - i) \$0.03 /kW of Metered Demand per month.

- 3) Rate for Schedule 3, Regulation and Frequency Response Service
  - i) \$0.07 /kW of Metered Demand per month.
- 4) Rate for Schedule 5, Spinning Reserve Service:
  - i) Applicable amounts and charges are set forth in Schedule 5 of the Tariff.
- 5) Rate for Schedule 6, Operating Reserve Service:
  - i) Applicable amounts and charges are set forth in Schedule 6 of the Tariff.

**6. Retail Network Integration Transmission Service Rate Determination:**

a.) For Retail Network Transmission Integration Service, the Demand Rate shall be determined as the product of the Load Ratio Share of Retail Direct Access eligible load and the Transmission Provider's Annual Transmission Revenue Requirement specified in Attachment H divided by twelve and the result divided by the average monthly non-coincidental peak demand for demand-metered Retail Direct Access eligible customers of the Transmission Provider. For Retail Direct Access-related Ancillary Services, the applicable rates shall be determined by multiplying the Tariff Ancillary Service rates in Schedules 1, 2 and 3 by the ratio of the Transmission Provider's 12 CP demand for Retail Direct Access eligible demand metered load to the Retail Direct Access eligible demand metered load's monthly average non-coincidental peak demands.

**ATTACHMENT O**

**STANDARD LARGE GENERATOR  
INTERCONNECTION PROCEDURES (LGIP)**  
(Applicable to Generating Facilities that exceed 20 MW)

**STANDARD LARGE GENERATOR  
INTERCONNECTION PROCEDURES (LGIP)  
(Applicable to Generating Facilities that exceed 20 MW)**

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Appendix 1 – Interconnection Request for a Large Generating Facility

Appendix 2 – Interconnection Feasibility Study Agreement

Appendix 3 – Interconnection System Impact Study Agreement

Appendix 4 – Interconnection Facilities Study Agreement

Appendix 5 – Optional Interconnection Study Agreement

Appendix 6 – Standard Large Generator Interconnection Agreement

Appendix 7 – Interconnection Procedures for a Wind Generating Plant

## **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 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 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.

**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 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.

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

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the 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 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 Standard Large Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.



**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 Standard Large Generator Interconnection Agreement 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 (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 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.

**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 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 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.

**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 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 Standard Large Generator Interconnection Procedures.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Feasibility 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 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 Standard Large Generator Interconnection Agreement 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 Standard Large Generator Interconnection Procedures.

**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 Standard Large Generator Interconnection Procedures.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

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

**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 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 a later queue priority date.

**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 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 Standard Large Generator Interconnection Agreement 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 Standard Large Generator Interconnection Procedures 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 Standard Large Generator Interconnection Agreement, 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 Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to the Transmission Provider's Transmission System.

**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 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.

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

**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.

**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 filed with FERC, and 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 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 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 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.

## **Section 2. Scope and Application**

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

Sections 2 through 13 apply to processing an Interconnection Request pertaining to a Large Generating Facility.

### **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**

In accordance with the Applicable Reliability Council policies, Transmission Provider shall provide base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list upon request subject to confidentiality provisions in LGIP Section 13.1. Transmission Provider is permitted to require that Interconnection Customer sign a confidentiality agreement before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects that are proposed for the Transmission System for which a transmission expansion plan has been submitted and approved by the applicable authority.

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

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

### **2.5 EIM Requirements**

The Interconnection Customer shall have a continuing duty to comply with Attachment P of this Tariff, as applicable.

## **Section 3. Interconnection Requests**

### **3.1 General**

An Interconnection Customer shall submit to the Transmission Provider an Interconnection Request in the form of Appendix 1 to this LGIP and a refundable deposit of \$10,000. Transmission Provider shall apply the deposit toward the cost of an Interconnection Feasibility Study. Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

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

### **3.2 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. The Transmission Provider may also study the Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the Transmission Provider must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

### **3.3 Valid Interconnection Request**

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

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

The expected In-Service Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility shall be no more than the process window for the regional expansion planning period (or in the absence of a regional planning process, the process window for Transmission Provider's expansion planning period) not to exceed seven years from the date the Interconnection Request is received by Transmission Provider, unless Interconnection Customer demonstrates that engineering, permitting and construction of the new Large Generating Facility or increase in capacity of the existing Generating Facility will take longer than the regional expansion planning period. The In-Service Date may succeed the date the Interconnection Request is received by the Transmission Provider by a period up to ten years, or longer where Interconnection Customer and Transmission Provider agree, such agreement not to be unreasonably withheld.

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

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

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

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

### **3.3.4 Scoping Meeting**

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

The purpose of the Scoping Meeting shall be to discuss alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such

interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection. Transmission Provider and Interconnection Customer will bring to the meeting such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting. Transmission Provider and Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, Interconnection Customer shall designate its Point of Interconnection, pursuant to Section 6.1, and one or more available alternative Point(s) of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.

### **3.4 OASIS Posting**

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 station or transmission line or lines where the interconnection will be made; (iv) the projected In-Service Date; (v) the status of the Interconnection Request, including Queue Position; (vi) the type of Interconnection Service being requested; and (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection Request; (ix) the type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); and (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed. Except in the case of an Affiliate, the list will not disclose the identity of Interconnection Customer until Interconnection Customer executes an LGIA or requests that Transmission Provider file an unexecuted LGIA with FERC. Before holding a Scoping Meeting with its Affiliate, Transmission Provider shall post on OASIS an advance notice of its intent to do so. Transmission Provider shall post to its OASIS site any deviations from the study timelines set forth herein. Interconnection Study reports and Optional Interconnection Study reports shall be posted to Transmission Provider's OASIS site subsequent to the meeting between Interconnection Customer and Transmission Provider to discuss the applicable study results. Transmission Provider shall also post any known deviations in the Large Generating Facility's In-Service Date.

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

Transmission Provider will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators and, if possible, include those results (if available) in its applicable Interconnection Study within the time frame specified in this 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.

### **3.6 Withdrawal**

Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to Transmission Provider. In addition, if Interconnection Customer fails to adhere to all requirements of this 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, Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cures the deficiency or to notify Transmission Provider of its intent to pursue Dispute Resolution.

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

Transmission Provider shall (i) update the OASIS Queue Position posting and (ii) refund to Interconnection Customer any portion of Interconnection Customer's deposit or study payments that exceeds the costs that Transmission Provider has incurred, including interest calculated in accordance with section 35.19a(a)(2) of FERC's regulations. 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.

## **Section 4. Queue Position**

#### **4.1 General**

Transmission Provider shall assign a Queue Position based upon the date and time of receipt of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of required information on the application form, and Interconnection Customer provides such information in accordance with Section 3.3.3, then Transmission Provider shall assign Interconnection Customer a Queue Position based on the date the application form was originally filed. Moving a Point of Interconnection shall result in a lowering of Queue Position if it is deemed a Material Modification under Section 4.4.3.

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

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

#### **4.2 Clustering**

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

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

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

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

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

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

#### **4.4 Modifications**

Interconnection Customer shall submit to Transmission Provider, in writing, modifications to any information provided in the Interconnection Request. Interconnection Customer shall retain its Queue Position if the modifications are in accordance with 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 6.4, Section 7.6 and Section 8.5 as applicable and Interconnection Customer shall retain its Queue Position.

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

**4.4.2** Prior to the return of the executed Interconnection Facility Study Agreement to Transmission Provider, the modifications permitted under this Section shall include specifically: (a) additional 15 percent decrease of

electrical output (MW), and (b) Large Generating Facility technical parameters associated with modifications to Large Generating Facility technology and transformer impedances; provided, however, the incremental costs associated with those modifications are the responsibility of the requesting Interconnection Customer.

- 4.4.3** Prior to making any modification other than those specifically permitted by 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. Any change to the Point of Interconnection, except those deemed acceptable under Sections 4.4.1, 6.1, 7.2 or so allowed elsewhere, shall constitute a Material Modification. Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.
- 4.4.4** Upon receipt of Interconnection Customer's request for modification permitted under this 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.
- 4.4.5** Extensions of less than three (3) cumulative years in the Commercial Operation Date of the Large Generating Facility to which the Interconnection Request relates are not material and should be handled through construction sequencing; provided, however, that extensions may necessitate a determination of whether additional studies are required pursuant to Applicable Laws and Regulations and Applicable Reliability Standards.

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

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

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



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

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

**5.1.1.3** If an LGIA has been submitted to FERC for approval before the effective date of the LGIP, then the LGIA would be grandfathered.

**5.1.2 Transition Period**

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

## **5.2 New Transmission Provider.**

If Transmission Provider transfers control of its Transmission System to a successor Transmission Provider during the period when an Interconnection Request is pending, the original Transmission Provider shall transfer to the successor Transmission Provider any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by this LGIP shall be paid by or refunded to the 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 either executed the LGIA or requested the filing of an unexecuted LGIA with FERC, unless otherwise provided, Interconnection Customer must complete negotiations with the successor Transmission Provider.

## **Section 6. Interconnection Feasibility Study**

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

Simultaneously with the acknowledgement of a valid Interconnection Request Transmission Provider shall provide to Interconnection Customer an Interconnection Feasibility Study Agreement in the form of Appendix 2. The Interconnection Feasibility Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Interconnection Feasibility Study. Within five (5) Business Days following the Scoping Meeting Interconnection Customer shall specify for inclusion in the attachment to the Interconnection Feasibility Study Agreement the Point(s) of Interconnection and any reasonable alternative Point(s) of Interconnection. Within five (5) Business Days following Transmission Provider's receipt of such designation, Transmission Provider shall tender to Interconnection Customer the Interconnection Feasibility Study Agreement signed by Transmission Provider, which includes a good faith estimate of the cost for completing the Interconnection Feasibility Study. Interconnection Customer shall execute and deliver to Transmission Provider the Interconnection Feasibility Study Agreement along with a \$10,000 deposit no later than thirty (30) Calendar Days after its receipt.

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

If the Interconnection Feasibility Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting, a substitute Point of Interconnection

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

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

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

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

The Interconnection Feasibility Study will consider the Base Case as well as all generating facilities (and with respect to (iii), any identified Network Upgrades) that, on the date the Interconnection Feasibility Study is commenced: (i) are directly interconnected to the Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the Transmission System; and (iv) have no Queue Position but have executed an LGIA or requested that an unexecuted LGIA be filed with FERC. The Interconnection Feasibility Study will consist of a power flow and short circuit analysis. The Interconnection Feasibility Study will provide a list of facilities and a non-binding good faith estimate of cost responsibility and a non-binding good faith estimated time to construct.

## **6.3 Interconnection Feasibility Study Procedures**

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

Transmission Provider shall provide Interconnection Customer supporting documentation, workpapers and relevant power flow, short circuit and stability databases for the Interconnection Feasibility Study, subject to confidentiality arrangements consistent with Section 13.1.

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

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

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

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

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

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

Unless otherwise agreed, pursuant to the Scoping Meeting provided in Section 3.3.4, simultaneously with the delivery of the Interconnection Feasibility Study to Interconnection Customer, Transmission Provider shall provide to Interconnection Customer an Interconnection System Impact Study Agreement in the form of Appendix 3 to this LGIP. The Interconnection System Impact Study Agreement shall provide that Interconnection Customer shall compensate Transmission Provider for the actual cost of the Interconnection System Impact Study. Within three (3) Business Days following the Interconnection Feasibility Study results meeting, Transmission Provider shall provide to Interconnection Customer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection System Impact Study.

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

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

If Interconnection Customer does not provide all such technical data when it delivers the Interconnection System Impact Study Agreement, Transmission Provider shall notify Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Interconnection System Impact

Study Agreement and Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection System Impact Study Agreement or deposit.

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

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

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

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

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

Transmission Provider shall coordinate the Interconnection System Impact Study with any Affected System that is affected by the Interconnection Request pursuant to Section 3.5 above. Transmission Provider shall utilize existing studies to the

extent practicable when it performs the study. Transmission Provider shall use Reasonable Efforts to complete the Interconnection System Impact Study within ninety (90) Calendar Days after the receipt of the Interconnection System Impact Study Agreement or notification to proceed, study payment, and technical data. If Transmission Provider uses Clustering, Transmission Provider shall use Reasonable Efforts to deliver a completed Interconnection System Impact Study within ninety (90) Calendar Days after the close of the Queue Cluster Window.

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

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

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

#### **7.6 Re-Study**

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

### **Section 8. Interconnection Facilities Study**

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

Simultaneously with the delivery of the Interconnection System Impact Study to Interconnection Customer, Transmission Provider shall provide to Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix 4. The Interconnection Facilities Study Agreement shall provide that Interconnection Customer shall compensate Transmission Provider for the actual

cost of the Interconnection Facilities Study. Within three (3) Business Days following the Interconnection System Impact Study results meeting, Transmission Provider shall provide to Interconnection Customer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection Facilities Study. Interconnection Customer shall execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to Transmission Provider within thirty (30) Calendar Days after its receipt, together with the required technical data and the greater of \$100,000 or Interconnection Customer's portion of the estimated monthly cost of conducting the Interconnection Facilities Study.

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

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

The Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facility to the Transmission System. The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Transmission Provider's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

## **8.3 Interconnection Facilities Study Procedures**

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

At the request of Interconnection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the

Interconnection Facilities Study, Transmission Provider shall notify Interconnection Customer as to the schedule status of the Interconnection Facilities Study. If Transmission Provider is unable to complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study report within the time required, it shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.

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

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

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

#### **8.5 Re-Study**

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

### **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 the Interconnection Customer, an E&P Agreement that authorizes Transmission Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, Transmission Provider shall not be obligated to offer an E&P Agreement if



Interconnection Customer is in Dispute Resolution as a result of an allegation that Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the LGIP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer's Queue Position or In-Service Date. The E&P Agreement shall provide for Interconnection Customer to pay the cost of all activities authorized by Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

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

## **Section 10. Optional Interconnection Study**

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

On or after the date when Interconnection Customer receives Interconnection System Impact Study results, Interconnection Customer may request, and Transmission Provider shall perform a reasonable number of Optional Studies. The request shall describe the assumptions that Interconnection Customer wishes Transmission Provider to study within the scope described in Section 10.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, Transmission Provider shall provide to Interconnection Customer an Optional Interconnection Study Agreement in the form of Appendix 5.

The Optional Interconnection Study Agreement shall: (i) specify the technical data that Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify Interconnection Customer's assumptions as to which Interconnection Requests with earlier queue priority dates will be excluded from the Optional Interconnection Study case and assumptions as to the type of interconnection service for Interconnection Requests remaining in the Optional Interconnection Study case, and (iii) Transmission Provider's estimate of the cost

of the Optional Interconnection Study. To the extent known by Transmission Provider, such estimate shall include any costs expected to be incurred by any Affected System whose participation is necessary to complete the Optional Interconnection Study. Notwithstanding the above, Transmission Provider shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.

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

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

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

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

The executed Optional Interconnection Study Agreement, the prepayment, and technical and other data called for therein must be provided to Transmission Provider within ten (10) Business Days of Interconnection Customer receipt of the Optional Interconnection Study Agreement. Transmission Provider shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed upon time period specified within the Optional Interconnection Study Agreement. If Transmission Provider is unable to complete the Optional Interconnection Study within such time period, it shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Any difference between the study payment and the actual cost of the study shall be paid to Transmission Provider or refunded to Interconnection Customer, as appropriate. Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation and workpapers and databases or data developed in the preparation of the Optional Interconnection Study, subject to confidentiality arrangements consistent with Section 13.1.

## **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, Transmission Provider shall tender a draft LGIA, together with draft appendices. The draft LGIA shall be in the form of Transmission Provider's FERC-approved standard form LGIA, which is in Appendix 6. Interconnection Customer shall execute and return the completed draft appendices within thirty (30) Calendar Days.

### **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 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 and request submission of the unexecuted LGIA with FERC 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 request either the filing of the unexecuted LGIA or 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, requested filing of an unexecuted 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. Transmission Provider shall provide to Interconnection Customer a final LGIA within fifteen (15) Business Days after the completion of the negotiation process.

### **11.3 Execution and Filing**

Within fifteen (15) Business Days after receipt of the final LGIA, Interconnection Customer shall provide Transmission Provider (A) reasonable evidence that 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 either: (i) execute two originals of the tendered LGIA and return them to Transmission Provider; or (ii) request in writing that Transmission Provider file with FERC an LGIA in unexecuted form. As soon as practicable, but not later than ten (10) Business Days after receiving either the two executed originals of the tendered LGIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or the request to file an unexecuted LGIA, Transmission Provider shall file the LGIA with FERC, together with its explanation of any matters as to which Interconnection Customer and Transmission Provider disagree and support for the costs that Transmission Provider proposes to charge to Interconnection Customer under the LGIA. An unexecuted LGIA should contain terms and conditions deemed appropriate by Transmission Provider for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted LGIA, they may proceed pending FERC action.

#### **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, subject to modification by FERC. Upon submission of an unexecuted LGIA, Interconnection Customer and Transmission Provider shall promptly comply with the unexecuted LGIA, subject to modification by FERC.

### **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 System Impact Study**

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

### **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.

The release of Confidential Information shall be subject to Applicable Laws and Regulations and Applicable Reliability Standards.

##### **13.1.1 Scope**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the 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 Order of Disclosure**

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

#### **13.1.7 Remedies**

The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's Breach of its obligations under this Section 13.1. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this 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 section 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 section 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 its 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 section 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**

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

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

If (i) at the time of the signing of an Interconnection Study Agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii)

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

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

#### **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.

### **13.6 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 the Interconnection Customer within thirty (30) Calendar Days of receipt of the Interconnection Request.

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

Appendix 1 - Interconnection Request for a Large Generating Facility

Appendix 2 - Interconnection Feasibility Study Agreement

Appendix 3 - Interconnection System Impact Study Agreement

Appendix 4 - Interconnection Facilities Study Agreement

Appendix 5 - Optional Interconnection Study Agreement

Appendix 6 - Standard Large Generator Interconnection Agreement

Appendix 7 - Interconnection Procedures for a Wind Generating Plant

**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 a Tariff.
2. This Interconnection Request is for (check one):  
 A proposed new Large Generating Facility.  
 An increase in the generating capacity or a Material Modification of an existing Generating Facility.
3. The type of interconnection service requested (check one):  
 Energy Resource Interconnection Service  
 Network Resource Interconnection Service
4.  Check here only if Interconnection Customer requesting Network Resource Interconnection Service also seeks to have its Generating Facility studied for Energy Resource Interconnection Service
5. Interconnection Customer provides the following information:
  - a. Address or location of the proposed new Large Generating Facility site (to the extent known) or, in the case of an existing Generating Facility, the name and specific location of the existing Generating Facility;
  - b. Maximum summer at  degrees C and winter at  degrees C megawatt electrical output of the proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of an existing Generating Facility;
  - c. General description of the equipment configuration;
  - d. Commercial Operation Date (Day, Month, and Year);
  - e. Name, address, telephone number, and e-mail address of Interconnection Customer's contact person;
  - f. Approximate location of the proposed Point of Interconnection (optional); and
  - g. Interconnection Customer Data (set forth in Attachment A)
6. Applicable deposit amount as specified in the LGIP.

7. Evidence of Site Control as specified in the LGIP (check one)  
\_\_\_\_ Is attached to this Interconnection Request  
\_\_\_\_ Will be provided at a later date in accordance with this LGIP

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

[To be completed by Transmission Provider]

9. Representative of the Interconnection Customer to contact:

[To be completed by Interconnection Customer]

10. This Interconnection Request is submitted by:

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

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

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

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

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



**Attachment A to Appendix 1  
Interconnection Request**

**LARGE GENERATING FACILITY DATA  
UNIT RATINGS**

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

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

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

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

***DIRECT AXIS***

***QUADRATURE AXIS***

Synchronous – saturated	$X_{dv}$	_____	$X_{qv}$	_____
Synchronous – unsaturated	$X_{di}$	_____	$X_{qi}$	_____
Transient – saturated	$X'_{dv}$	_____	$X'_{qv}$	_____
Transient – unsaturated	$X'_{di}$	_____	$X'_{qi}$	_____
Subtransient – saturated	$X''_{dv}$	_____	$X''_{qv}$	_____
Subtransient – unsaturated	$X''_{di}$	_____	$X''_{qi}$	_____
Negative Sequence – saturated	$X_{2v}$	_____		
Negative Sequence – unsaturated	$X_{2i}$	_____		
Zero Sequence – saturated	$X_{0v}$	_____		
Zero Sequence – unsaturated	$X_{0i}$	_____		
Leakage Reactance	$X_{lm}$	_____		

**Attachment A to Appendix 1  
Interconnection Request**

**FIELD TIME CONSTANT DATA (SEC)**

Open Circuit	$T'_{do}$ _____	$T'_{qo}$ _____
Three-Phase Short Circuit Transient	$T'_{d3}$ _____	$T'_q$ _____
Line to Line Short Circuit Transient	$T'_{d2}$ _____	
Line to Neutral Short Circuit Transient	$T'_{d1}$ _____	
Short Circuit Subtransient	$T''_d$ _____	$T''_q$ _____
Open Circuit Subtransient	$T''_{do}$ _____	$T''_{qo}$ _____

**ARMATURE TIME CONSTANT DATA (SEC)**

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

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

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

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

Positive	$R_1$ _____
Negative	$R_2$ _____
Zero	$R_0$ _____

Rotor Short Time Thermal Capacity  $I_2^2t =$  \_\_\_\_\_

Field Current at Rated kVA, Armature Voltage and PF = \_\_\_\_\_ amps

Field Current at Rated kVA and Armature Voltage, 0 PF = \_\_\_\_\_ amps

Three Phase Armature Winding Capacitance = \_\_\_\_\_ microfarad

Field Winding Resistance = \_\_\_\_\_ ohms \_\_\_\_\_ °C

Armature Winding Resistance (Per Phase) = \_\_\_\_\_ ohms \_\_\_\_\_ °C

**CURVES**

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

**GENERATOR STEP-UP TRANSFORMER DATA RATINGS**

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

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

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

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

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

**IMPEDANCE**

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

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

**EXCITATION SYSTEM DATA**

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

**Attachment A to Appendix 1  
Interconnection Request**

**GOVERNOR SYSTEM DATA**

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

**WIND GENERATORS**

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

\_\_\_\_\_

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

Inverter manufacturer, model name, number, and version:

\_\_\_\_\_

List of adjustable setpoints for the protective equipment or software:

\_\_\_\_\_

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

**Attachment A to Appendix 1  
Interconnection Request**

**INDUCTION GENERATORS**

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

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

**APPENDIX 2 TO LGIP  
INTERCONNECTION FEASIBILITY STUDY AGREEMENT**

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

**RECITALS**

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

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

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

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's FERC-approved LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed an Interconnection Feasibility Study consistent with Section 6.0 of this LGIP in accordance with the Tariff.
- 3.0 The scope of the Interconnection Feasibility Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection Feasibility Study shall be based on the technical information provided by Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting. Transmission Provider reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Feasibility Study and as designated in accordance with Section 3.3.4 of the LGIP. If, after the designation of the Point of Interconnection pursuant to Section 3.3.4 of the LGIP, Interconnection Customer modifies its Interconnection Request pursuant to

Section 4.4, the time to complete the Interconnection Feasibility Study may be extended.

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

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

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

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

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

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

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of Transmission Provider or Transmission Owner, if applicable]**

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

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

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

**[Insert name of Interconnection Customer]**

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

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

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



**Attachment A to Appendix 2  
Interconnection Feasibility  
Study Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE  
INTERCONNECTION FEASIBILITY STUDY**

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

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

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

**APPENDIX 3 TO LGIP  
INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT**

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

**RECITALS**

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

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

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

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

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Transmission Provider's FERC-approved LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed an Interconnection System Impact Study consistent with Section 7.0 of this LGIP in accordance with the Tariff.

- 3.0 The scope of the Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study and the technical information provided by Interconnection Customer in the Interconnection Request, subject to any modifications in accordance with 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 Interconnection Customer System Impact Study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- 5.0 The Interconnection System Impact Study report shall provide the following information:
- identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
  - identification of any thermal overload or voltage limit violations resulting from the interconnection;
  - identification of any instability or inadequately damped response to system disturbances resulting from the interconnection and
  - description and non-binding, good faith estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit, instability, and power flow issues.
- 6.0 Interconnection Customer shall provide a deposit of \$50,000 for the performance of the Interconnection System Impact Study. Transmission Provider's good faith estimate for the time of completion of the Interconnection System Impact Study is [insert date].

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

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

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

**IN WITNESS THEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of Transmission Provider or Transmission Owner, if applicable]**

By: \_\_\_\_\_ By: \_\_\_\_\_  
Title: \_\_\_\_\_ Title: \_\_\_\_\_  
Date: \_\_\_\_\_ Date: \_\_\_\_\_

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

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

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

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

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

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

## APPENDIX 4 to LGIP

### INTERCONNECTION FACILITIES STUDY AGREEMENT

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

### RECITALS

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

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

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

**WHEREAS**, Interconnection Customer has requested Transmission Provider to perform an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties 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 FERC-approved 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 The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in Attachment A and the data provided in Attachment B to this Agreement.

- 4.0 The Interconnection Facilities Study report (i) shall provide a description, estimated cost of (consistent with Attachment A), schedule for required facilities to interconnect the Large Generating Facility to the Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.
- 5.0 Interconnection Customer shall provide a deposit of \$100,000 for the performance of the Interconnection Facilities Study. The time for completion of the Interconnection Facilities Study is specified in Attachment A.

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

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

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of Transmission Provider or Transmission Owner, if applicable]**

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

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

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

**[Insert name of Interconnection Customer]**

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

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

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



*Interconnection Facilities*

**Study Agreement**

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

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

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

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

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

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 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:

---



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

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

**RECITALS**

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

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

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

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

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's FERC-approved LGIP.

- 2.0 Interconnection Customer elects and Transmission Provider shall cause an Optional Interconnection Study consistent with Section 10.0 of this LGIP to be performed in accordance with the Tariff.
- 3.0 The scope of the Optional Interconnection Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Optional Interconnection Study shall be performed solely for informational purposes.
- 5.0 The Optional Interconnection Study report shall provide a sensitivity analysis based on the assumptions specified by Interconnection Customer in Attachment A to this Agreement. The Optional Interconnection Study will identify Transmission Provider's Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or interconnection service based upon the assumptions specified by Interconnection Customer in Attachment A.
- 6.0 Interconnection Customer shall provide a deposit of \$10,000 for the performance of the Optional Interconnection Study. Transmission Provider's good faith estimate for the time of completion of the Optional Interconnection Study is [insert date].

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

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

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

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of Transmission Provider or Transmission Owner, if applicable]**

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

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

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

**[Insert name of Interconnection Customer]**

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

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

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

Appendix 6 to the Standard Large  
Generator Interconnection Procedures

STANDARD LARGE GENERATOR  
INTERCONNECTION AGREEMENT (LGIA)

Original Service Agreement No. \_\_\_\_

**STANDARD LARGE GENERATOR  
INTERCONNECTION AGREEMENT (LGIA)**

**(Applicable to Generating Facilities that exceed 20 MW)**

**BETWEEN**

**PORTLAND GENERAL ELECTRIC COMPANY**

**AND**

---

Issued by: [Name]  
[Title]

Effective: [Date], 200\_

Issued on: [Date], 200\_



**Recitals**

<b>Article 1.</b>	<b>Definitions</b>
<b>Article 2.</b>	<b>Effective Date, Term and Termination</b>
2.1	Effective Date
2.2	Term of Agreement
2.3	Termination Procedures
	2.3.1 Written Notice
	2.3.2 Default
2.4	Termination Costs
2.5	Disconnection
2.6	Survival
<b>Article 3.</b>	<b>Regulatory Filings</b>
3.1	Filing
<b>Article 4.</b>	<b>Scope of Service</b>
4.1	Interconnection Product Options
	4.1.1 Energy Resource Interconnection Service
	4.1.1.1 The Product
	4.1.1.2 Transmission Delivery Service Implications
	4.1.2 Network Resource Interconnection Service
	4.1.2.1 The Product
	4.1.2.2 Transmission Delivery Service Implications
4.2	Provision of Service
4.3	Performance Standards
4.4	No Transmission Delivery Service
4.5	Interconnection Customer Provided Services
<b>Article 5.</b>	<b>Interconnection Facilities Engineering, Procurement, and Construction</b>
5.1	Options
	5.1.1 Standard Option
	5.1.2 Alternate Option
	5.1.3 Option to Build
	5.1.4 Negotiated Option
5.2	General Conditions Applicable to Option to Build
5.3	Liquidated Damages
5.4	Power System Stabilizers
5.5	Equipment Procurement
5.6	Construction Commencement
5.7	Work Progress
5.8	Information Exchange
5.9	Limited Operation

- 5.10 Interconnection Customer's Interconnection Facilities (“ICIF”)
  - 5.10.1 Large Generating Facility Specifications
  - 5.10.2 Transmission Provider’s Review
  - 5.10.3 ICIF Construction
- 5.11 Transmission Provider's Interconnection Facilities Construction
- 5.12 Access Rights
- 5.13 Lands of Other Property Owners
- 5.14 Permits
- 5.15 Early Construction of Base Case Facilities
- 5.16 Suspension
- 5.17 Taxes
  - 5.17.1 Interconnection Customer Payments Not Taxable
  - 5.17.2 Representations and Covenants
  - 5.17.3 Indemnification for the Cost Consequences of Current Tax Liability Imposed Upon Transmission Provider
  - 5.17.4 Tax Gross-Up Amount
  - 5.17.5 Private Letter Ruling or Change or Clarification of Law
  - 5.17.6 Subsequent Taxable Events
  - 5.17.7 Contests
  - 5.17.8 Refund
  - 5.17.9 Taxes Other Than Income Taxes
  - 5.17.10 Transmission Owners Who Are Not Transmission Providers
- 5.18 Tax Status
- 5.19 Modification**
  - 5.19.1 General
  - 5.19.2 Standards
  - 5.19.3 Modification Costs
- Article 6. Testing and Inspection**
  - 6.1 Pre-Commercial Operation Date Testing and Modifications
  - 6.2 Post-Commercial Operation Date Testing and Modifications
  - 6.3 Right to Observe Testing
  - 6.4 Right to Inspect
- Article 7. Metering**
  - 7.1 General
  - 7.2 Check Meters
  - 7.3 Standards
  - 7.4 Testing of Metering Equipment
  - 7.5 Metering Data
- Article 8. Communications**
  - 8.1 Interconnection Customer Obligations
  - 8.2 Remote Terminal Unit

8.3	No Annexation
<b>Article 9.</b>	<b>Operations</b>
9.1	General
9.2	Control Area Notification
9.3	Transmission Provider Obligations
9.4	Interconnection Customer Obligations
9.5	Start-Up and Synchronization
9.6	Reactive Power
9.6.1	Power Factor Design Criteria
9.6.2	Voltage Schedules
9.6.2.1	Governors and Regulators
9.6.3	Payment for Reactive Power
9.7	Outages and Interruptions
9.7.1	Outages
9.7.1.1	Outage Authority and Coordination
9.7.1.2	Outage Schedules
9.7.1.3	Outage Restoration
9.7.2	Interruption of Service
9.7.3	Under-Frequency and Over Frequency Conditions
9.7.4	System Protection and Other Control Requirements
9.7.4.1	System Protection Facilities
9.7.5	Requirements for Protection
9.7.6	Power Quality
9.8	Switching and Tagging Rules
9.9	Use of Interconnection Facilities by Third Parties
9.9.1	Purpose of Interconnection Facilities
9.9.2	Third Party Users
9.10	Disturbance Analysis Data Exchange
<b>Article 10.</b>	<b>Maintenance</b>
10.1	Transmission Provider Obligations
10.2	Interconnection Customer Obligations
10.3	Coordination
10.4	Secondary Systems
10.5	Operating and Maintenance Expenses
<b>Article 11.</b>	<b>Performance Obligation</b>
11.1	Interconnection Customer Interconnection Facilities
11.2	Transmission Provider's Interconnection Facilities
11.3	Network Upgrades and Distribution Upgrades
11.4	Transmission Credits
11.4.1	Repayment of Amounts Advanced for Network Upgrades
11.5	Provision of Security

11.6	Interconnection Customer Compensation
11.6.1	Interconnection Customer Compensation for Actions During Emergency Condition
<b>Article 12.</b>	<b>Invoice</b>
12.1	General
12.2	Final Invoice
12.3	Payment
12.4	Disputes
<b>Article 13.</b>	<b>Emergencies</b>
13.1	Definition
13.2	Obligations
13.3	Notice
13.4	Immediate Action
13.5	Transmission Provider Authority
13.5.1	General
13.5.2	Reduction and Disconnection
13.6	Interconnection Customer Authority
13.7	Limited Liability
<b>Article 14.</b>	<b>Regulatory Requirements and Governing Law</b>
14.1	Regulatory Requirements
14.2	Governing Law
<b>Article 15.</b>	<b>Notices</b>
15.1	General
15.2	Billings and Payments
15.3	Alternative Forms of Notice
15.4	Operations and Maintenance Notice
<b>Article 16.</b>	<b>Force Majeure</b>
<b>Article 17.</b>	<b>Default</b>
17.1	Default
17.1.1	General
17.1.2	Right to Terminate
<b>Article 18.</b>	<b>Indemnity, Consequential Damages and Insurance</b>
18.1	Indemnity
18.1.1	Indemnified Person
18.1.2	Indemnifying Party
18.1.3	Indemnity Procedures
18.2	Consequential Damages
18.3	Insurance

- Article 19. Assignment**
- Article 20. Severability**
- Article 21. Comparability**
- Article 22. Confidentiality**
  - 22.1 Confidentiality
    - 22.1.1 Term
    - 22.1.2 Scope
    - 22.1.3 Release of Confidential Information
    - 22.1.4 Rights
    - 22.1.5 No Warranties
    - 22.1.6 Standard of Care
    - 22.1.7 Order of Disclosure
    - 22.1.8 Termination of Agreement
    - 22.1.9 Remedies
    - 22.1.10 Disclosure to FERC, its Staff or a State
- Article 23. Environmental Releases**
- Article 24. Information Requirements**
  - 24.1 Information Acquisition
  - 24.2 Information Submission by Transmission Provider
  - 24.3 Updated Information Submission by Interconnection Customer
  - 24.4 Information Supplementation
- Article 25. Information Access and Audit Rights**
  - 25.1 Information Access
  - 25.2 Reporting of Non-Force Majeure Events
  - 25.3 Audit Rights
  - 25.4 Audit Rights Periods
    - 25.4.1 Audit Rights Period for Construction-Related Accounts and Records
    - 25.4.2 Audit Rights Period for All Other Accounts and Records
  - 25.5 Audit Results
- Article 26. Subcontractors**
  - 26.1 General
  - 26.2 Responsibility of Principal
  - 26.3 No Limitation by Insurance
- Article 27. Disputes**
  - 27.1 Submission
  - 27.2 External Arbitration Procedures
  - 27.3 Arbitration Decisions
  - 27.4 Costs
- Article 28. Representations, Warranties and Covenants**
  - 28.1 General
    - 28.1.1 Good Standing

- 28.1.2 Authority
- 28.1.3 No Conflict
- 28.1.4 Consent and Approval

**Article 29. Joint Operating Committee**

**Article 30. Miscellaneous**

- 30.1 Binding Effect
- 30.2 Conflicts
- 30.3 Rules of Interpretation
- 30.4 Entire Agreement
- 30.5 No Third Party Beneficiaries
- 30.6 Waiver
- 30.7 Headings
- 30.8 Multiple Counterparts
- 30.9 Amendment
- 30.10 Modification by the Parties
- 30.11 Reservation of Rights
- 30.12 No Partnership

Appendix A - Interconnection Facilities, Network Upgrades and Distribution Upgrades

Appendix B - Milestones

Appendix C - Interconnection Details

Appendix D - Security Arrangements Details

Appendix E - Commercial Operation Date

Appendix F - Addresses for Delivery of Notices and Billings

Appendix H - Reliability Management System

## **STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT**

**THIS STANDARD LARGE 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” with a Large Generating Facility), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ (“Transmission Provider and/or Transmission Owner”). Interconnection Customer and Transmission Provider each may be referred to as a “Party” or collectively as the “Parties.”

### **RECITALS**

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

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

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

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

**When used in this Standard Large Generator Interconnection Agreement, 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 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 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.

**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 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.

**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 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 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 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 subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

**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 Standard Large Generator Interconnection Agreement 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 (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 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.

**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 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 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.

**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 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 Standard Large Generator Interconnection Procedures.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Feasibility 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 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 Standard Large Generator Interconnection Agreement 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 Standard Large Generator Interconnection Procedures.

**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 Standard Large Generator Interconnection Procedures.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

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

**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 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 a later queue priority date.

**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 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 connects 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 Standard Large Generator Interconnection Agreement 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 Standard Large Generator Interconnection Procedures 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 Standard Large Generator Interconnection Agreement, 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 Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to the Transmission Provider's Transmission System.

**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 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.

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

**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.

**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 filed with FERC, and 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 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 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 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.

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

**2.1 Effective Date.** This LGIA shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. Transmission Provider shall promptly file this LGIA with FERC upon execution

in accordance with Article 3.1, if required.

**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, including the filing with FERC of a notice of termination of this LGIA, which notice has been accepted for filing by FERC.

**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, that are the responsibility of the Terminating Party 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. Upon termination of this LGIA, unless otherwise ordered or approved by FERC:

**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 consistent with the studies identified in Attachment A.

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

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

**4.1.2.1 The Product.** Transmission Provider must conduct the necessary studies and construct the Network Upgrades needed to integrate the Large Generating Facility (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 other Network Resources. To the extent Interconnection Customer wants to receive Network Resource Interconnection Service, Transmission Provider shall construct the facilities identified in Attachment 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. If such Party is a Transmission Provider or Transmission Owner, then that Party shall amend the LGIA and submit the amendment to FERC for approval.
- 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 Standard Option or Alternate Option set forth below for completion of Transmission Provider's Interconnection Facilities and Network Upgrades as set forth in Appendix A, Interconnection Facilities and Network Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones.
- 5.1.1 Standard Option.** Transmission Provider shall design, procure, and construct Transmission Provider's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete Transmission Provider's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B, Milestones. Transmission Provider shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event Transmission Provider reasonably expects that it will not be able to complete Transmission Provider's Interconnection Facilities and Network Upgrades by the specified dates, Transmission Provider shall promptly provide written notice to Interconnection Customer and shall undertake Reasonable Efforts to meet the earliest dates thereafter.
- 5.1.2 Alternate Option.** If the dates designated by Interconnection Customer are acceptable to Transmission Provider, Transmission Provider shall so notify Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities by the designated dates.

If Transmission Provider subsequently fails to complete Transmission Provider's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades



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

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

**5.1.4 Negotiated Option.** If Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, Interconnection Customer shall so notify Transmission Provider within thirty (30) Calendar Days, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades by Interconnection Customer) pursuant to which Transmission Provider is responsible for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, Transmission Provider shall assume responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Network Upgrades pursuant to 5.1.1, Standard Option.

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

- (1) Interconnection Customer shall engineer, procure equipment, and construct Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by Transmission Provider;
- (2) Interconnection Customer's engineering, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law and Applicable Reliability Standards to which Transmission Provider would be subject in the engineering, procurement or construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;
- (3) Transmission Provider shall review and approve the engineering design, equipment acceptance tests, and the construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;
- (4) prior to commencement of construction, Interconnection Customer shall provide to Transmission Provider a schedule for construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from Transmission Provider;
- (5) at any time during construction, Transmission Provider shall have the right to gain unrestricted access to Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;
- (6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Transmission Provider, Interconnection Customer shall be obligated to remedy deficiencies in that portion of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;
- (7) Interconnection Customer shall indemnify Transmission Provider for claims arising from Interconnection Customer's construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;
- (8) Interconnection Customer shall transfer control of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Provider;

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

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

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

**5.3 Liquidated Damages.** The actual damages to Interconnection Customer, in the event Transmission Provider's Interconnection Facilities or Network Upgrades are not completed by the dates designated by Interconnection Customer and accepted by Transmission Provider pursuant to 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  $\frac{1}{2}$  of 1 percent per day of the actual cost of Transmission Provider's Interconnection Facilities and Network Upgrades, in the aggregate, for which Transmission Provider has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of Transmission Provider 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 the Transmission Provider's failure to meet its schedule.

No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for the Large Generating Facility's Trial Operation or to export power from the Large Generating Facility on the

specified dates, unless Interconnection Customer would have been able to commence use of Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for Large Generating Facility's Trial Operation or to export power from the Large Generating Facility, but for Transmission Provider's delay;

(2) Transmission Provider's failure to meet the specified dates is the result of the action or inaction of Interconnection Customer or any other Interconnection Customer who has entered into an LGIA with Transmission Provider or any cause beyond Transmission Provider's reasonable control or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

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

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

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

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

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

- 5.6 Construction Commencement.** Transmission Provider shall commence construction of Transmission Provider's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:
- 5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;
  - 5.6.2** Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of Transmission Provider's Interconnection Facilities and Network Upgrades;
  - 5.6.3** Transmission Provider has received written authorization to proceed with construction from Interconnection Customer by the date specified in Appendix B, Milestones; and
  - 5.6.4** Interconnection Customer has provided security to Transmission Provider in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.
- 5.7 Work Progress.** The Parties will keep each other advised periodically as to the progress of their respective design, procurement and construction efforts. Either Party may, at any time, request a progress report from the other Party. If, at any time, Interconnection Customer determines that the completion of Transmission Provider's Interconnection Facilities will not be required until after the specified In-Service Date, Interconnection Customer will provide written notice to Transmission Provider of such later date upon which the completion of Transmission Provider's Interconnection Facilities will be required.
- 5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Parties' Interconnection Facilities and compatibility of the Interconnection Facilities with Transmission Provider's Transmission System, and shall work diligently and in good faith to make any necessary design changes.
- 5.9 Limited Operation.** If any of Transmission Provider's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Large Generating Facility, Transmission Provider shall, upon the request and at the expense of Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Large Generating Facility and Interconnection Customer's Interconnection Facilities may operate prior to the completion of Transmission Provider's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards,

Good Utility Practice, and this LGIA. Transmission Provider shall permit Interconnection Customer to operate the Large Generating Facility and Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

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

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

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

**5.10.3 ICIF Construction.** The ICIF shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the ICIF, such as: a one-line diagram, a site plan showing the Large Generating Facility and the ICIF, plan and elevation drawings showing the layout of the ICIF, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with Interconnection

Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the ICIF, and the impedances (determined by factory tests) for the associated step-up transformers and the Large Generating Facilities. The Interconnection Customer shall provide Transmission Provider specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable.

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

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 and 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 state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove Transmission Provider or Transmission Owner's Interconnection Facilities and/or Network Upgrades upon such property.

- 5.14 Permits.** Transmission Provider or Transmission Owner and Interconnection Customer 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 (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 Taxes.**

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

**5.17.2 Representations and Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the Transmission System, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to Transmission Provider for Transmission Provider's Interconnection Facilities will be capitalized by Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of Transmission Provider's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At Transmission Provider's request, Interconnection Customer shall provide Transmission Provider with a report from an independent engineer confirming

its representation in clause (iii), above. Transmission Provider represents and covenants that the cost of Transmission Provider's Interconnection Facilities paid for by Interconnection Customer will have no net effect on the base upon which rates are determined.

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

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

The indemnification obligation shall terminate at the earlier of (1) the expiration of the 10-year testing period and the applicable statute of limitation, as it may be extended by Transmission Provider upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

**5.17.4 Tax Gross-Up Amount.** Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by

the parties, this means that Interconnection Customer will pay Transmission Provider, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on Transmission Provider (“Current Taxes”) on the excess of (a) the gross income realized by Transmission Provider as a result of payments or property transfers made by Interconnection Customer to Transmission Provider under this LGIA (without regard to any payments under this Article 5.17) (the “Gross Income Amount”) over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the “Present Value Depreciation Amount”), plus (2) an additional amount sufficient to permit Transmission Provider to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

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

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

Transmission Provider shall keep Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a

privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. Transmission Provider shall allow Interconnection Customer to attend all meetings with IRS officials about the request and shall permit Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

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

**5.17.7 Contests.** In the event any Governmental Authority determines that Transmission Provider’s receipt of payments or property constitutes income that is subject to taxation, Transmission Provider shall notify Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by Interconnection Customer and at Interconnection Customer’s sole expense, Transmission Provider shall appeal, protest, seek abatement of, or otherwise oppose such determination. Upon Interconnection Customer’s written request and sole expense, Transmission Provider shall file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. Transmission Provider reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but Transmission Provider shall keep Interconnection Customer informed, shall consider in good faith suggestions from Interconnection Customer about the conduct of the contest, and shall reasonably permit Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

Interconnection Customer shall pay to Transmission Provider on a periodic basis, as invoiced by Transmission Provider, Transmission Provider’s documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. At any time during the contest, Transmission Provider may agree

to a settlement either with Interconnection Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Transmission Provider, but reasonably acceptable to Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding sentence. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. Any settlement without Interconnection Customer's consent or such written advice will relieve Interconnection Customer from any obligation to indemnify Transmission Provider for the tax at issue in the contest.

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

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

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

Interconnection Customer to the date Transmission Provider refunds such payment to Interconnection Customer, and

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

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

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

**5.17.10 Transmission Owners Who Are Not Transmission Providers.** If

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

**5.18 Tax Status.** Each Party shall cooperate with the other to maintain the other Party'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, Applicable Reliability Standards and Good Utility Practice.



**5.19.3 Modification Costs.** Interconnection Customer shall not be directly assigned for the costs of any additions, modifications, or replacements that Transmission Provider makes to Transmission Provider's Interconnection Facilities or the Transmission System to facilitate the interconnection of a third party to Transmission Provider's Interconnection Facilities or the Transmission System, or to provide transmission service to a third party under Transmission Provider's 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 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 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.

## **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 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.**
- 9.6.1 Power Factor Design Criteria.**
- 9.6.1.1 Synchronous Generation.** 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 the Transmission Provider has established different requirements that apply to all synchronous generators in the Control Area on a comparable basis.
- 9.6.1.2 Non-Synchronous Generation.** Interconnection Customer shall design the Large Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the Transmission Provider has established a different power factor range that applies to all non-synchronous

generators in the Control Area on a comparable basis. This power factor range standard shall be dynamic and can be met 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, or a combination of the two. This requirement shall only apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of the effective date of the Final Rule establishing this requirement (Order No. 827).

**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.

## **9.7 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 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** When the interruption or reduction must be made under circumstances which do not allow for advance notice, Transmission Provider shall notify Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its expected duration. Telephone notification shall be followed by written notification as soon as practicable;
- 9.7.2.4** Except during the existence of an Emergency Condition, when the interruption or reduction can be scheduled without advance notice, Transmission Provider shall notify Interconnection Customer in advance regarding the timing of such scheduling and further notify Interconnection Customer of the expected duration. Transmission Provider shall coordinate with Interconnection Customer using Good Utility Practice to schedule the interruption or reduction

during periods of least impact to Interconnection Customer and Transmission Provider;

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

**9.7.3 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 the Transmission Provider's Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at the sole expense of the Interconnection Customer.
- 11.3 Network Upgrades and Distribution Upgrades.** Transmission Provider or Transmission Owner shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades. The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless Transmission Provider or Transmission Owner elects to fund the capital for the Network Upgrades, they shall be solely funded by Interconnection Customer.
- 11.4 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, including any tax gross-up or other tax-related payments associated with Network Upgrades, and not refunded to Interconnection Customer pursuant to Article 5.17.8 or otherwise, 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 in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. 35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the 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, the 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 and is consistent with the Uniform Commercial Code of the jurisdiction identified in Article 14.2.1. Such security for payment shall be in an amount sufficient to cover the costs for constructing, 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 the 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. 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, 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. The initial notice shall be followed as soon as practicable with written notice.

**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 blackstart (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of Transmission Provider's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

**13.5.2 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 whatever 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 or 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 the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.

**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 effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

Either Party may change the notice information in this LGIA by giving five (5) Business Days written notice prior to the effective date of the change.

**15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.

**15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out in Appendix F.

**15.4 Operations and Maintenance Notice.** Each Party shall notify the other Party in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

## **Article 16. Force Majeure**

### **16.1 Force Majeure.**

**16.1.1** Economic hardship is not considered a Force Majeure event.

**16.1.2** Neither Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## **Article 17. Default**

### **17.1 Default**

**17.1.1 General.** No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act or 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**

**18.1 Indemnity.** The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this LGIA on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnified Party.

**18.1.1 Indemnified Person.** If an Indemnified Person is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Person may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgement with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this Article 18, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

**18.1.3 Indemnity Procedures.** Promptly after receipt by an Indemnified Person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Person shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the Indemnifying Party and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the Indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses.

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

**18.2 Consequential Damages.** Other than the Liquidated Damages heretofore described, in no event shall either Party be liable under any provision of this LGIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other



theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

**18.3 Insurance.** Each party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Party, the following minimum insurance coverages, with insurers authorized to do business in the state where the Point of Interconnection is located:

**18.3.1** Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.

**18.3.3** Comprehensive Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.

**18.3.4** Excess Public Liability Insurance over and above the Employers' Liability Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.

**18.3.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name the other Party, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers

waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

- 18.3.6** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- 18.3.7** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.
- 18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.
- 18.3.9** Within ten (10) 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) days thereafter, each Party 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, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior secured debt is rated at investment grade or better by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements

applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this article, it shall notify the other Party that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this 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 the Transmission Provider with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this article is void and ineffective. Any assignment under this 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**

**21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

## **Article 22. Confidentiality**

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

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

If requested by either Party, the other Party shall provide in writing, the basis for asserting that the information referred to in this Article 22 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority.

Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

The release of Confidential information shall be subject to Applicable Laws and Regulations and Applicable Reliability Standards.

**22.1.1 Term.** During the term of this 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, 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 section 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 section 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 section 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 Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party’s Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect

the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

### **Article 23. Environmental Releases**

**23.1** Each Party shall notify the other Party, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Party copies of any publicly available reports filed with any Governmental Authorities addressing such events.

### **Article 24. Information Requirements**

**24.1 Information Acquisition.** Transmission Provider and Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.

**24.2 Information Submission by Transmission Provider.** The initial information submission by Transmission Provider shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include Transmission System information necessary to allow Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Parties. On a monthly basis Transmission Provider shall provide Interconnection Customer a status report on the construction and installation of Transmission Provider's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.

**24.3 Updated Information Submission by Interconnection Customer.** The updated information submission by Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation. Interconnection Customer shall submit a completed copy of the Large Generating Facility data requirements contained in Appendix 1 to the LGIP. It shall also include any additional information provided to Transmission Provider for the



Feasibility and Facilities Study. Information in this submission shall be the most current Large Generating Facility design or expected performance data. Information submitted for stability models shall be compatible with Transmission Provider standard models. If there is no compatible model, Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If Interconnection Customer's data is materially different from what was originally provided to Transmission Provider pursuant to the Interconnection Study Agreement between Transmission Provider and Interconnection Customer, then Transmission Provider will conduct appropriate studies to determine the impact on the Transmission Provider Transmission System based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed.

**24.4 Information Supplementation.** Prior to the Operation Date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Large Generating Facility information or "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Large Generating Facility as required by Good Utility Practice such as an open circuit "step voltage" test on the Large Generating Facility to verify proper operation of the Large Generating Facility's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Large Generating Facility at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent change in Large Generating Facility terminal voltage initiated by a change in the voltage regulators reference voltage. Interconnection Customer shall provide validated test recordings showing the responses of Large Generating Facility terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Large Generating Facility's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Large Generating Facility terminal or field voltages is provided. Large Generating Facility testing shall be conducted and results provided to Transmission Provider for each individual generating unit in a station.

Subsequent to the 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 the 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 therefor. 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.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it

has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this 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 the 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 the Interconnection Customer shall not constitute a waiver of the 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 both of 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.** Transmission Provider shall have the right to make a unilateral filing with FERC to modify this LGIA with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this LGIA shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 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.

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

**[Insert name of Transmission Provider or Transmission Owner, if applicable]**

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

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

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

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

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

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

**[Insert name of Interconnection Customer]**

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

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

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

Appendix A to LGIA

**Interconnection Facilities, Network Upgrades and Distribution Upgrades**

**1. Interconnection Facilities:**

(a) **[insert Interconnection Customer's Interconnection Facilities]:**

(b) **[insert Transmission Provider's Interconnection Facilities]:**

**2. Network Upgrades:**

(a) **[insert Stand Alone Network Upgrades]:**

(b) **[insert Other Network Upgrades]:**

**3. Distribution Upgrades:**

## **Appendix B to LGIA**

### **Milestones**

**Appendix C to LGIA**  
**Interconnection Details**

## **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 H to LGIA

### Reliability Management System

**The provisions of this Appendix H shall apply if and at such times as Transmission Provider has become a party to and is bound by the Reliability Management System Agreement. In the event this Appendix H applies and there is any conflict between this Appendix H and any other provision of this LGIA, the terms of this Appendix H shall prevail and shall be deemed to be the final intent of the Parties.**

#### 1. Definitions:

**1.1 Member:** Any party to the WECC Agreement.

**1.2 Reliability Management System or RMS:** The contractual reliability management program implemented through the WECC Reliability Criteria Agreement, Section 2 of this Appendix H, and any similar contractual arrangement.

**1.3 Western Interconnection:** The area comprising those states and provinces, or portions thereof, in Western Canada, Northern Mexico and the Western United States in which Members of the WECC operate synchronously connected transmission systems.

**1.4 WECC:** The Western Electricity Coordinating Council or any successor entity.

**1.5 WECC Agreement:** The Western Electricity Coordinating Council Agreement dated March 20, 1967, as such may be amended from time to time.

**1.6 WECC Reliability Criteria Agreement:** The Western Electricity Coordinating Council Reliability Criteria Agreement among the WECC and certain of its member Transmission Providers, as such may be amended from time to time.

**1.7 WECC Staff:** Those employees of the WECC, including personnel hired by the WECC on a contract basis, designated as responsible for the administration of the RMS.

## 2. Terms and Conditions

**2.1 Purpose.** In order to maintain the reliable operation of the transmission grid, the WECC Reliability Criteria Agreement sets forth reliability criteria adopted by the WECC to which Interconnection Customer and Transmission Provider shall be required to comply.

**2.2 Compliance.** Interconnection Customer shall comply with the requirements of the WECC Reliability Criteria Agreement, including the applicable WECC reliability criteria set forth in Section IV of Annex A thereof, and, in the event of failure to comply, agrees to be subject to the sanctions applicable to such failure. Such sanctions shall be assessed pursuant to the procedures contained in the WECC Reliability Criteria Agreement. Each and all of the provisions of the WECC Reliability Criteria Agreement are hereby incorporated by reference into this Appendix H as though set forth fully herein, and Interconnection Customer shall for all purposes be considered a Participant, and shall be entitled to all of the rights and privileges and be subject to all of the obligations of a Participant, under and in connection with the WECC Reliability Criteria Agreement, including but not limited to the rights, privileges and obligations set forth in Sections 5, 6 and 10 of the WECC Reliability Criteria Agreement.

**2.3 Payment and Sanctions.** Interconnection Customer shall be responsible for reimbursing Transmission Provider for any monetary sanctions assessed against Transmission Provider due to the action or inaction of Interconnection Customer by WECC pursuant to the WECC Reliability Criteria Agreement. Interconnection Customer also shall be responsible for payment of any monetary sanction assessed against Interconnection Customer by WECC pursuant to the WECC Reliability Criteria Agreement. Any such payment shall be made pursuant to the procedures specified in the WECC Reliability Criteria Agreement.

**2.4 Transfer of Control or Sale of Generation Facilities.** In any sale or transfer of control of any generation facilities subject to this Agreement, Interconnection Customer shall as a condition of such sale or transfer require the acquiring party or transferee with respect to the transferred facilities either to assume the obligations of Interconnection Customer with respect to this LGIA or to enter into an agreement with Transmission Provider imposing on the acquiring party or transferee the same obligations applicable to Interconnection Customer pursuant to this Appendix H.

**2.5 Publication.** Interconnection Customer consents to the release by the WECC of information related to Interconnection Customer's compliance with this LGIA only in accordance with the WECC Reliability Criteria Agreement.

**2.6 Third Parties.** Except for the rights and obligations between the WECC and Interconnection Customer specified in this Appendix H, this LGIA creates contractual rights and obligations solely between the Parties. Nothing in this LGIA shall create, as

between the Parties or with respect to the WECC: (a) any obligation or liability whatsoever (other than as expressly provided in this LGIA), or (b) any duty or standard of care whatsoever. In addition, nothing in this LGIA shall create any duty, liability, or standard of care whatsoever as to any other party. Except for the rights, as a third-party beneficiary under this Appendix H, of the WECC against Interconnection Customer, no third party shall have any rights whatsoever with respect to enforcement of any provision of this LGIA. Transmission Provider and Interconnection Customer expressly intend that the WECC is a third-party beneficiary to this Appendix H, and the WECC shall have the right to seek to enforce against Interconnection Customer any provision of this Appendix H, provided, that specific performance shall be the sole remedy available to the WECC pursuant to this Appendix H, and Interconnection Customer shall not be liable to the WECC pursuant to this LGIA for damages of any kind whatsoever (other than the payment of sanctions to the WECC, if so construed), whether direct, compensatory, special, indirect, consequential, or punitive.

**2.7 Reserved Rights.** Nothing in the RMS or the WECC Reliability Criteria Agreement shall affect the right of Transmission Provider, subject to any necessary regulatory approval, to take such other measures to maintain reliability, including disconnection, that Transmission Provider may otherwise be entitled to take.

**2.8 Severability.** If one or more provisions of this Appendix H shall be invalid, illegal or unenforceable in any respect, it shall be given effect to the extent permitted by applicable law, and such invalidity, illegality or unenforceability shall not affect the validity of the other provisions of this LGIA.

**2.9 Termination.** Interconnection Customer may terminate its obligations pursuant to this Appendix H:

- (a) If after the effective date of this Appendix H, the requirements of the WECC Reliability Criteria Agreement applicable to Interconnection Customer are amended so as to adversely affect Interconnection Customer, provided that Interconnection Customer gives fifteen (15) days' notice of such termination to Transmission Provider and WECC within forty-five (45) days of the date of issuance of a FERC order accepting such amendment for filing, provided further that the forty-five (45) day period within which notice of termination is required may be extended by Interconnection Customer for an additional forty-five (45) days if Interconnection Customer gives written notice to Transmission Provider of such requested extension within the initial forty-five (45) day period; or
- (b) For any reason on one year's written notice to Transmission Provider and the WECC.

**2.10 Mutual Agreement.** This Appendix H may be terminated at any time by mutual agreement of Transmission Provider and Interconnection Customer.

## **APPENDIX 7 to LGIP**

### **INTERCONNECTION PROCEDURES FOR A WIND GENERATING PLANT**

Appendix 7 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 3.3 of this LGIP, may provide to the 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 the Transmission Provider to complete the System Impact Study.

## ATTACHMENT P

### Energy Imbalance Market

1. General Provision - Purpose and Effective Date of Attachment P

2. Election of Transmission Customers to become PGE EIM Participating Resources

3. Eligibility to be a PGE EIM Participating Resource

3.1 Internal Resources - Transmission Rights

3.2 Resources External to PGE's BAA

3.2.1 Use of Pseudo-Ties

3.2.2 Pseudo-Tie Costs

3.3 Application and Certification of PGE EIM Participating Resources

3.3.1 Application

3.3.2 Processing the Application

3.3.3 Certification Notice

3.3.4 Status of Resource Pending Certification

3.3.5 Notice and Obligation to Report a Change in Information

4. Roles and Responsibilities

4.1 Transmission Provider as the PGE EIM Entity and the PGE EIM Entity Scheduling Coordinator

4.1.1 Responsibilities

4.1.1.1 Identification of EIM Entity Scheduling Coordinator

4.1.1.2 Processing PGE EIM Participating Resource Applications

4.1.1.3 Determination of EIM Implementation Decisions for PGE's BAA

4.1.1.4 PGE EIM Business Practice

4.1.1.5 Determination to Take Contingency Actions or Permanently Terminate Participation in the EIM

4.1.2 Responsibilities of the PGE EIM Entity to Provide Required Information

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4.1.2.1 Provide Modeling Data to the MO

4.1.2.2 Registration

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

4.1.3.2 Communication of Manual Dispatch Information

4.1.3.3 Confirmation

4.1.3.4 Dispatch of EIM Available Balancing Capacity of a Non-Participating Resource

4.1.4 Provision of Meter Data

4.1.5 Settlement of MO Charges and Payments

4.1.6 Dispute Resolution with the MO

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4.2 Transmission Customer Responsibilities

4.2.1 Initial Registration Data

4.2.1.1 Transmission Customers with a PGE EIM Participating Resource

4.2.1.2 Transmission Customers with Non-Participating Resources

4.2.2 Responsibility to Update Required Data

4.2.2.1 Transmission Customers with a PGE EIM Participating Resource

4.2.2.2 Transmission Customers with Non-Participating Resources

4.2.3 Outages

4.2.4 Submission of Forecast Data

4.2.4.1 Transmission Customers with a PGE EIM Participating Resource or Non-Participating Resource in the PGE BAA

4.2.4.2 Transmission Customers with Non-Participating Resources that are Variable Energy Resources

4.2.4.3 Transmission Customers with Load

4.2.4.4 Transmission Customers Without Resources or Load in PGE's BAA

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 PGE BAA

4.2.4.5.2 Final Submissions of Transmission Customer Base Schedules

4.2.5 Metering for Transmission Customers with Non-Participating Resources

5. Transmission Operations

5.1 Provision of Information Regarding Real-Time Status of the Transmission Provider's Transmission System

5.2 Provision of EIM Transfer Capacity by a PGE Interchange Rights Holder

5.3 Provision of EIM Transfer Capability by PGE EIM Entity

6. System Operations Under Normal And Emergency Conditions

6.1 Compliance With Reliability Standards

6.2 Good Utility Practice

6.3 Management of Contingencies and Emergencies

6.3.1 EIM Disruption

6.3.2 Manual Dispatch

7. Outages

7.1 PGE EIM Entity Transmission Outages

7.1.1 Planned Transmission Outages and Known Derates

7.1.2 Unplanned Transmission Outages

7.2 PGE BAA Transmission Owner Outages

7.3 PGE EIM Participating Resource Outages

7.3.1 Planned PGE EIM Participating Resource Outages and Known Derates

7.3.2 Unplanned PGE EIM Participating Resource Outages

7.3.3 Unplanned Derates

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

7.4.2 Unplanned Outages of Resources of Transmission Customers with Non-Participating Resources

7.4.3 Unplanned Derates

8. EIM Settlements and Billing

8.1 Instructed Imbalance Energy (IIE)

8.2 Uninstructed Imbalance Energy (UIE)

8.3 Unaccounted for Energy (UFE)

8.4 Charges for Under-Scheduling or Over-Scheduling Load

8.4.1 Under-Scheduling Load

8.4.2 Over-Scheduling Load

8.4.3 Distribution of Under-Scheduling or Over-Scheduling Proceeds

8.5 EIM Uplifts

8.5.1 EIM BAA Real-Time Market Neutrality (Real-Time Imbalance Energy Offset - BAA)

8.5.2 EIM Entity BAA Real-Time Congestion Offset

8.5.3 EIM Entity Real-Time Marginal Cost of Losses Offset

8.5.4 EIM Neutrality Settlement

8.5.5 Real-Time Bid Cost Recovery

8.5.6 Flexible Ramping ~~Constraint~~Product

8.5.7 Inaccurate or Late Actual Settlement Quality Meter Data Penalty

8.5.8 Other EIM Settlement Provisions



8.6 MO Tax Liabilities

8.7 EIM Transmission Service Charges

8.8 Variable Energy Resource Forecast Charge

8.9 EIM Payment Calendar

8.10 EIM Residual Balancing Account

8.11 Market Validation and Price Correction

8.12 Allocation of Operating Reserves

8.12.1 Payments

8.12.2 Charges

9. Compliance

9.1 Provision of Data

9.2 Rules of Conduct

9.3 Enforcement

10. Market Contingencies

10.1 Temporary Suspension by the MO

10.2 Termination of Participation in EIM by the PGE EIM Entity

10.3 Corrective Actions Taken by the PGE EIM Entity for Temporary Contingencies

10.3.1. Corrective Actions for Temporary Contingencies

10.4 Temporary Schedules 4, 4R, 10, and 11

10.4.1 Temporary Schedule 4 Energy Imbalance Service

10.4.2 Temporary Schedule 4R Retail Energy Imbalance Service

10.4.3 Temporary Schedule 10 Generator Imbalance Service

10.4.4 Temporary Schedule 11 – Real Power Losses

## ATTACHMENT P

### EIM

#### 1. General Provision - Purpose and Effective Date of Attachment P

Attachment P provides for Transmission Provider's participation as the PGE EIM Entity in the EIM administered by the MO. Attachment P shall be in effect upon its acceptance by the Commission, with the exceptions provided below, for as long as Transmission Provider implements the EIM and until all final settlements are finalized resulting from such implementation. Sections 4.1.5, 4.1.6, 8 and 10 of this Attachment P take effect no earlier than October 1, 2017, or the implementation date of Transmission Provider's participation in the EIM, whichever is later. All other sections of this Attachment P take effect no earlier than July 25, 2017 or seven (7) days prior to the start of parallel operations.

This Attachment P shall apply to all Transmission Customers and Interconnection Customers, as applicable, with new and existing service agreements under Parts II and III and Attachments M and O of this Tariff, ~~as well as all Transmission Customers with legacy transmission agreements that pre-existed this Tariff and that expressly incorporate by reference the applicability of PGE's Tariff and/or this Attachment P in particular.~~ To the extent an Interconnection Customer controls the output of a generator located in PGE's BAA, the PGE EIM Entity may require the Interconnection Customer to comply with a requirement in this Attachment P that on its face applies to a Transmission Customer to the extent that the PGE EIM Entity makes a determination, in its sole discretion, that the Interconnection Customer is the more appropriate party to satisfy the requirements of Attachment P than any Transmission Customer.

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This Attachment P 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 P is inconsistent with a provision in the remainder of this Tariff with regard to the PGE EIM Entity's administration of the EIM, this Attachment P shall prevail.

This Attachment P governs the relationship between the PGE EIM Entity and all Transmission Customers and Interconnection Customers subject to this Tariff. This Attachment P 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 PGE 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 PGE EIM Participating Resources**

The decision of a Transmission Customer to participate in the EIM with resources as PGE EIM Participating Resources is voluntary. A Transmission Customer that chooses to have a resource become a PGE EIM Participating Resource must:

(1) Meet the requirements specified in Section 3 of this Attachment P and the PGE 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 P and the PGE EIM BP posted on the Transmission Provider's OASIS.

Transmission Customers which own or control multiple resources may elect to have any or all of their resources be PGE EIM Participating Resources, in which case any resources that are not elected by the Transmission Customer to be PGE EIM Participating Resources shall be treated as Non-Participating Resources for purposes of this Attachment P.

### **3. Eligibility to be a PGE EIM Participating Resource**

#### **3.1 Internal Resources - Transmission Rights**

Resources owned or controlled by Transmission Customers and located within the metered boundaries of PGE's BAA are eligible to become PGE EIM Participating Resources. The Transmission Customer that owns or controls 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 either (i) a Service Agreement for Firm Point-to-Point Transmission Service or (ii) a Service Agreement for Non-Firm Point-to-Point Transmission Service, and such Transmission Customer elects to participate in the EIM.

#### **3.2 Resources External to PGE'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 PGE's BAA may participate in the EIM as a PGE EIM Participating Resource if the Transmission Customer (1) implements a Pseudo-Tie into PGE's BAA, consistent with PGE's business practice posted on Transmission Provider's OASIS, (2) has arranged firm transmission over any third-party transmission systems to a PGE BAA intertie boundary equal to the amount of energy that will be Dynamically Transferred through a Pseudo-Tie into PGE's BAA, consistent with PGE's business practice posted on Transmission Provider's OASIS, and (3) has secured transmission service consistent with Section 3.1 of this Attachment P.

### **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 PGE's BAA.

## **3.3 Application and Certification of PGE EIM Participating Resources**

### **3.3.1 Application**

To register a resource to become a PGE EIM Participating Resource, an applicant must submit a completed application, as set forth in the PGE EIM BP, and shall provide a deposit of \$1,500 for the PGE EIM Entity to process the application. Upon completion of processing the completed application, the PGE EIM Entity shall charge and the applicant shall pay the actual costs of the application processing. Any difference between the deposit and the actual costs of the application processing shall be paid by or refunded to the PGE EIM Participating Resource applicant, as

appropriate. At the time of application, any PGE 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 PGE EIM BP, as applicable.

### **3.3.2 Processing the Application**

The PGE 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 PGE EIM Entity shall validate through the application that the PGE EIM Participating Resource applicant has satisfied Sections 3.1 and 3.2 of this Attachment P, as applicable, and met minimum telemetry and metering requirements, as set forth in the MO's requirements and the PGE EIM BP. Within 45 days of receipt of the application and in accordance with the process outlined in the PGE EIM BP, the PGE EIM Entity may request additional information and will attempt to resolve any minor deficiencies in the application with the Transmission Customer. The PGE 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 PGE EIM Entity approves the application, it shall send notification of approval to both the PGE EIM Participating Resource applicant and the MO. The process by which the PGE EIM Entity sends notification of approval shall be set forth in the PGE EIM BP. If the PGE EIM Entity rejects the application, the PGE EIM Entity shall send notification stating the grounds for rejection to the PGE EIM Participating Resource applicant. Upon request, the PGE EIM Entity may provide guidance to the applicant as to how the PGE EIM Participating Resource applicant may cure the grounds for the rejection. In the event that the PGE EIM Entity has granted an extension of the 45-day period but the applicant has neither provided the additional requested information nor otherwise resolved

identified deficiencies within six (6) months of the PGE EIM Entity's initial receipt of the application, the application shall be deemed rejected by the PGE EIM Entity. If an application is rejected, the PGE EIM Participating Resource applicant may resubmit its application at any time (including submission of a new processing fee deposit).

### **3.3.3 Certification Notice**

Upon approval of an application and in accordance with the process specified in the PGE EIM BP, certification by the PGE EIM Entity of the PGE EIM Participating Resource to participate in the EIM shall occur 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 pro forma EIM Participating Resource Agreement;
- (2) Qualified to become or retained the services of a MO-certified EIM Participating Resource Scheduling Coordinator;
- (3) Met the necessary metering requirements of this Tariff and Section 29.10 of the MO Tariff and the EIM Participating Resource Scheduling Coordinator has executed the MO's pro forma Meter Service Agreement for Scheduling Coordinators; 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 Dispatch Instructions every five minutes from the MO.

Upon receiving notice from the MO of the completion of the enumerated requirements by the Transmission Customer, the PGE EIM Entity shall provide notice to both the Transmission Customer with a PGE EIM Participating Resource and the MO that the PGE EIM Participating Resource is certified and therefore eligible to participate in the EIM. The process by which the PGE EIM Entity certifies Transmission Customers with a PGE EIM Participating Resource shall be set forth in the PGE 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 PGE EIM Participating Resource but the application has not been approved, or (ii) has not yet been certified by the PGE EIM Entity consistent with Section 3.3.3 of this Attachment P, 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 PGE EIM Participating Resource has an ongoing obligation to inform the PGE EIM Entity of any changes to any of the information submitted as part of the application process under this Attachment P. The PGE EIM BP shall set forth the process and timing requirements for notifying the PGE EIM Entity of such changes.

This information includes, but is not limited to:

- (1) Any change in the PGE 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 PGE EIM Participating Resource in the EIM or the Transmission Customer has terminated the PGE 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 P.

#### **4. Roles and Responsibilities**

##### **4.1 Transmission Provider as the PGE EIM Entity and the PGE EIM Entity Scheduling**

###### **Coordinator**

###### **4.1.1 Responsibilities**

###### **4.1.1.1 Identification of EIM Entity Scheduling Coordinator**

The PGE EIM Entity can serve as the PGE EIM Entity Scheduling Coordinator or retain a third party to perform such role. If the PGE EIM Entity is not the PGE EIM Entity Scheduling Coordinator, the PGE EIM Entity shall communicate to the PGE EIM Entity Scheduling Coordinator the information required by the PGE EIM Entity Scheduling Coordinator to fulfill its responsibilities in the EIM.

The PGE EIM Entity Scheduling Coordinator shall coordinate and facilitate the EIM in accordance with the requirements of the MO Tariff. The PGE EIM Entity Scheduling

Coordinator must meet the certification requirements of the MO and enter into any necessary MO agreements.

#### **4.1.1.2 Processing PGE EIM Participating Resource Applications**

The PGE EIM Entity shall be responsible for processing applications of Transmission Customers seeking authorization to participate in the EIM with resources as PGE EIM Participating Resources in accordance with Section 3.3 of this Attachment P.

#### **4.1.1.3 Determination of EIM Implementation Decisions for PGE's BAA**

The PGE EIM Entity is solely responsible for making any decisions with respect to EIM participation that the MO requires of EIM Entities. The PGE EIM Entity has made the following determinations:

- (1) Eligibility requirements: Eligibility requirements are set forth in Section 3 of Attachment P.
- (2) Load Aggregation Points: There shall be one LAP for PGE's BAA.
- (3) MO load forecast: The PGE EIM Entity shall utilize 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 PGE EIM Entity and all Transmission Customers with PGE 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 PGE 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 PGE EIM Business Practice**

The PGE EIM Entity shall establish and revise, as necessary, procedures to facilitate implementation and operation of the EIM through the PGE 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 PGE EIM Entity may take corrective actions in PGE's BAA in accordance with the requirements of Section 10.3 of Attachment P.

In addition, the PGE 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 and by making a filing pursuant to Section 205 of the Federal Power Act to revise this Tariff consistent with the Commission's requirements.

#### **4.1.2 Responsibilities of the PGE EIM Entity to Provide Required Information**

##### **4.1.2.1 Provide Modeling Data to the MO**

The PGE EIM Entity shall provide the MO information associated with transmission facilities within PGE's BAA, including, but not limited to, network constraints and associated limits that must be observed in PGE's BAA network and interties with other BAAs.

##### **4.1.2.2 Registration**

The PGE EIM Entity shall register all Non-Participating Resources with the MO. The PGE EIM Entity may choose to obtain default energy bids from the MO for Non-Participating Resources that are Balancing Authority Area Resources. The PGE 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 P.

#### **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 PGE 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 PGE EIM Entity shall inform the MO of a Manual Dispatch by providing adjustment information for the affected resources in accordance with Section 29.34 of the MO Tariff.

##### **4.1.3.3 Confirmation**

The MO shall calculate, and the PGE 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 business practices 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 PGE 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 PGE 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 PGE 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**

The PGE EIM Entity shall be responsible for financial settlement of all charges and payments allocated by the MO to the PGE EIM Entity. The PGE EIM Entity shall sub-allocate EIM charges and payments in accordance with Schedules 1, 1A, 4, 4R and 10 of this Tariff or Section 8 of Attachment P, as applicable.

#### **4.1.6 Dispute Resolution with the MO**

The PGE EIM Entity shall manage dispute resolution with the MO for the PGE EIM Entity settlement statements consistent with Section 29.13 of the MO Tariff, Section 12 of this Tariff, and the PGE EIM BP. Transmission Customers with PGE 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 PGE EIM Participating Resource; (2) Transmission Customers with a Non-Participating Resource; (3) Transmission Customers with load within PGE's BAA; and (4) subject to the limitations identified in Section 4.2.4.5.1 of this Attachment P, Transmission Customers wheeling through PGE's BAA.

##### **4.2.1 Initial Registration Data**

###### **4.2.1.1 Transmission Customers with a PGE EIM Participating Resource**

A Transmission Customer with a PGE EIM Participating Resource shall provide the MO and the PGE 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 PGE 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 PGE EIM Participating Resource**

Each Transmission Customer with a PGE EIM Participating Resource has an ongoing obligation to inform the MO and PGE EIM Entity of any changes to any of the information submitted by the Transmission Customer provided under Section 4.2.1 of this Attachment P that reflects changes in operating characteristics as required by Section 29.4(e)(4)(D) of the MO Tariff. The PGE EIM BP shall set forth the process and timing requirements of notifying the PGE 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 PGE 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 P. The PGE EIM BP shall set forth the process and timing requirements of notifying the PGE EIM Entity of such changes.

## **4.2.3 Outages**

Transmission Customers with PGE 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 P. The PGE EIM BP shall set forth the outage information requirements for PGE 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 PGE 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 PGE'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 PGE's BAA. The submissions shall be in the format and within the timing requirements established by the MO and the PGE EIM Entity as required in Section 4.2.4.5 of this Attachment P and the PGE EIM BP.

##### **4.2.4.1 Transmission Customers with a PGE EIM Participating Resource or Non-Participating Resource in the PGE BAA**

A Transmission Customer with a PGE EIM Participating Resource or a Non-Participating Resource is not required to submit Forecast Data for:

- (1) resources located in PGE's BAA that are less than three MW; or
- (2) behind-the-meter generation which is not contained in the MO's network model.

Each PGE EIM Participating Resource Scheduling Coordinator shall provide to the PGE EIM Entity the energy bid range data (without price information) of the respective resources it represents that are participating in the EIM.



Each PGE EIM Participating Resource Scheduling Coordinator shall also provide the PGE 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**

A Transmission Customer with a Non-Participating Resource that is a Variable Energy Resource shall submit (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 provide, at minimum, a three-hour rolling forecast with 15-minute granularity, updated every 15 minutes, and may provide, in the alternative, a three-hour rolling forecast with 5-minute granularity, updated every 5 minutes, and in accordance with any additional procedures set forth in the PGE EIM BP.

A Transmission Customer with a Non-Participating Resource that is a Variable Energy Resource shall submit resource Forecast Data consistent with this Section 4.2.4.2 using any one of the following methods:

- (1) The Transmission Customer may elect to use the PGE EIM Entity's Variable Energy Resource reliability forecast prepared for Variable Energy Resources within PGE's BAA, which shall be considered to be the basis for physical changes in the output of the resource communicated to the MO, for purposes of settlement pursuant to Schedule 10 of this Tariff;

(2) The Transmission Customer may elect to self-supply the Forecast Data and provide such data to the PGE EIM Entity, which shall be considered to be the basis for physical changes in the output of the resource communicated to the MO, for purposes of settlement pursuant to Schedule 10 of this Tariff. The PGE EIM BP will specify the manner in which Transmission Customers may self-supply Forecast Data; or

(3) The Transmission Customer may elect that the MO produce Forecast Data for the Variable Energy Resource, made available to the Transmission Customer in a manner consistent with Section 29.11(j)(1) of the MO Tariff, which shall be considered to be the basis for physical changes in the output of the resource communicated to the MO, for purposes of settlement pursuant to Schedule 10 of this Tariff.

A Transmission Customer with a Non-Participating Resource that is a Variable Energy Resource must elect one of the above methods prior to commencement of the EIM or prior to such other date in accordance with the procedures set forth in the PGE EIM BP. A Transmission Customer with a Non-Participating Resource that is a Variable Energy Resource may change its election by providing advance notice to the PGE EIM Entity, in accordance with the procedures set forth in the PGE EIM BP.

To the extent a Transmission Customer with a Non-Participating Resource that is a Variable Energy Resource elects method (2) above, and such Transmission Customer fails to submit resource Forecast Data for any time interval as required by this Section 4.2.4.2 of this Attachment P, the PGE EIM Entity shall apply method (1) for purposes of settlement pursuant to Schedule 10 of this Tariff.

#### **4.2.4.3 Transmission Customers with Load**

As set forth in Sections 4.2.4 of this Attachment P, 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. For purposes of settling Energy Imbalance Service pursuant to Schedule 4 and Schedule 4R of this Tariff, the PGE 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 PGE's BAA**

A Transmission Customer which does not have any resources or load within PGE's BAA shall submit a Transmission Customer Base Schedule that includes Interchange and Intrachange Forecast Data to the PGE 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 PGE BAA.**

Transmission Customers with resources or load in the PGE BAA shall submit their initial Transmission Customer Base Schedules 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 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, at any time but 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 will be considered financially binding and Transmission Customers may not submit further changes. 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 Annexes A and B 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 PGE EIM Entity to comply with Section 4.1.4 of this Attachment P.

### **5. Transmission Operations**

#### **5.1 Provision of Information Regarding Real-Time Status of the Transmission Provider’s Transmission System**

The PGE 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 PGE Interchange Rights Holder**

The PGE EIM Entity shall facilitate the provision of transmission capacity for EIM Transfers offered by a PGE Interchange Rights Holder by providing the MO with information about the amounts made available by the PGE Interchange Rights Holder for EIM Transfers. The provision of EIM Transfer capacity shall be implemented through the PGE Interchange Rights Holder's submission of an e-Tag by 75 minutes prior to the Operating Hour ("T-75").

The PGE Interchange Rights Holder shall include on the e-Tag the OASIS identification reservation number(s) associated with the transmission rights made available for EIM Transfers and shall also include the Market Operator, all transmission providers, and path operators associated with the OASIS identification reservation number(s) identified on the e-Tag. The PGE 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 made available for EIM Transfers shall never exceed the PGE Interchange Rights Holder's transmission rights.

### **5.3 Provision of EIM Transfer Capability by the PGE EIM Entity**

The PGE EIM Entity shall facilitate the provision of transmission capacity for EIM Transfers by providing the MO with information about the amounts available for EIM Transfers utilizing Available Transfer Capability ("ATC"). Such amounts shall be in addition to any amounts made

available by PGE Interchange Rights Holders pursuant to Section 5.2 of this Attachment P. The provision of EIM Transfer capacity corresponding to ATC shall be implemented by 40 minutes prior to the Operating Hour (“T-40”) by the PGE EIM Entity. The PGE EIM Entity shall include an e-Tag, with an OASIS identification reservation number(s) created for EIM Transfers utilizing ATC, and shall also include the MO, all transmission providers, and path operators associated with the OASIS identification reservation number(s) identified in the e-Tag. The amount of ATC indicated on the e-Tag will be based upon the lower of the amount of ATC calculated by each EIM Entity at that interface by T-40. The ATC 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.

## **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 PGE EIM Entity, Transmission Customers with PGE EIM Participating Resources, or Transmission Customers with Non-Participating Resources to comply with applicable reliability standards.

The PGE 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 PGE'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 PGE's BAA, including facilities of PGE BAA Transmission Owners. If requested by a Transmission Customer that is also a PGE BAA Transmission Owner, the PGE EIM Entity will provide additional information or data related to EIM operation as it may relate to facilities of a PGE BAA Transmission Owner.

## **6.2 Good Utility Practice**

The PGE EIM Entity, Transmission Customers with Non-Participating Resources, and Transmission Customers with PGE EIM Participating Resources shall comply with Good Utility Practice with respect to this Attachment P.

## **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 PGE 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 PGE EIM Entity may issue a Manual Dispatch order to a Transmission Customer with a PGE EIM Participating Resource or a Non-Participating Resource in PGE's BAA, to address reliability or operational issues in PGE's BAA that the EIM is not able to address through normal economic dispatch and congestion management.

The PGE EIM Entity shall inform the MO of a Manual Dispatch as soon as possible.

## **7. Outages**

### **7.1. PGE EIM Entity Transmission Outages**

#### **7.1.1 Planned Transmission Outages and Known Derates**

The PGE 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. The PGE EIM Entity shall update the submittal if there are changes to the transmission outage plan.

#### **7.1.2 Unplanned Transmission Outages**

The PGE 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.

### **7.2 PGE BAA Transmission Owner Outages**



Transmission Customers that are also PGE BAA Transmission Owners shall provide the PGE EIM Entity with planned and unplanned transmission outage data. Planned outages shall be reported to the PGE EIM Entity 7 or more days in advance and preferably at least 30 days in advance of the outage. Unplanned outages shall be reported to the PGE EIM Entity as soon as possible but no later than 30 minutes after the outage commences.

The PGE EIM Entity shall communicate information regarding planned and unplanned outages of PGE BAA Transmission Owner facilities to the MO as soon as practicable upon receipt of the information from the PGE BAA Transmission Owner.

### **7.3 PGE EIM Participating Resource Outages**

#### **7.3.1 Planned PGE EIM Participating Resource Outages and Known Derates**

PGE EIM Participating Resource Scheduling Coordinators shall submit information regarding planned resource outages and known derates to the PGE EIM Entity. Planned outages and known derates shall be reported to the PGE EIM Entity 7 or more days in advance and preferably at least 30 days in advance of the outage or known derate. The PGE 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. PGE EIM Participating Resource Scheduling Coordinators shall update the submittal if there are changes to the resource outage plan.

#### **7.3.2 Unplanned PGE 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 PGE EIM Participating Resource Scheduling Coordinator is responsible for notifying the PGE EIM Entity of required changes. Unplanned outages shall be reported to the PGE EIM

Entity as soon as possible but no later than 30 minutes after the outage commences. The PGE EIM Entity shall then submit this information to the MO's outage management system.

### **7.3.3 Unplanned Derates**

Changes in availability of 10 MW or 5% of Pmax (whichever is greater) lasting 15 minutes or longer must be reported to the PGE EIM Entity. These reports are due within 30 minutes of discovery, and are required only to include effective time and MW availability. The PGE 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 PGE EIM Entity 7 or more days in advance and preferably at least 30 days in advance of the outage. The Transmission Customer with a Non-Participating Resource shall update the submittal if there are changes to the resource's outage plan.

The PGE 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.

### **7.4.2 Unplanned Outages 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 PGE EIM Entity as soon as possible but no later than 30 minutes after the outage commences.

In the event of a forced outage required to be reported under Section 29.9(e) of the MO Tariff, the PGE EIM Entity is responsible for notifying the MO of required changes through the MO's outage management system.

#### **7.4.3 Unplanned Derates**

Changes in availability of 10 MW or 5% of Pmax (whichever is greater) lasting 15 minutes or longer must be reported to the PGE EIM Entity. These reports are due within 30 minutes of discovery, and are required only to include effective time and MW availability. The PGE EIM Entity shall then submit this information to the MO's outage management system.

### **8. EIM Settlements and Billing**

The PGE EIM BP shall include information on the specific charge codes applicable to EIM settlement.

#### **8.1 Instructed Imbalance Energy (IIE)**

The PGE EIM Entity shall settle as IIE imbalances that result from (1) operational adjustments of a Transmission Customer's affected Interchange, which includes changes by a Transmission Customer after T-57, (2) resource imbalances created by Manual Dispatch or an EIM Available Balancing Capacity dispatch, or (3) an adjustment to resource imbalances created by adjustments to resource forecasts pursuant to Section 11.5 of the MO Tariff and using the RTD or FMM price

at the applicable PNode. Any allocations to the PGE EIM Entity pursuant to Section 29.11(b)(1) and (2) of the MO Tariff for IIE that is not otherwise recovered under Schedule 10 of this Tariff shall be settled directly with each Transmission Customer according to this Section 8.1.

### **8.2 Uninstructed Imbalance Energy (UIE)**

Any charges or payments to the PGE EIM Entity pursuant to Section 29.11(b)(3)(B) and (C) of the MO Tariff for UIE not otherwise recovered under Schedule 4, Schedule 4R, or Schedule 10 shall not be sub-allocated to Transmission Customers.

### **8.3 Unaccounted for Energy (UFE)**

Any charges to the PGE EIM Entity pursuant to Section 29.11(c) of the MO Tariff for UFE shall not be sub-allocated to Transmission Customers.

### **8.4 Charges for Under-Scheduling or Over-Scheduling Load**

#### **8.4.1 Under-Scheduling Load**

Any charges to the PGE EIM Entity pursuant to Section 29.11(d)(1) of the MO Tariff for underscheduling load shall be assigned to the Transmission Customers subject to Schedule 4 and Schedule 4R based on each Transmission Customer's respective under-scheduling imbalance ratio share, which is the ratio of the Transmission Customer's under-scheduled load imbalance amount relative to all other Transmission Customers' under-scheduled load imbalance amounts who have under-scheduled load for the Operating Hour, expressed as a percentage.

#### **8.4.2 Over-Scheduling Load**

Any charges to the PGE EIM Entity pursuant to Section 29.11(d)(2) of the MO Tariff for overscheduling load shall be assigned to the Transmission Customers subject to Schedule 4 and Schedule 4R based on each Transmission Customer's respective over-scheduling imbalance ratio share, which is the ratio of the Transmission Customer's over-scheduled load imbalance amount relative to all other Transmission Customers' over-scheduled load imbalance amounts who have over-scheduled load for the Operating Hour, expressed as a percentage.

#### **8.4.3 Distribution of Under-Scheduling or Over-Scheduling Proceeds**

Any payment to the PGE EIM Entity pursuant to Section 29.11(d)(3) of the MO Tariff shall be distributed to Transmission Customers that were not subject to underscheduling or overscheduling charges during the Trading Day on the basis of Metered Demand and in accordance with the procedures outlined in the PGE EIM BP.

### **8.5 EIM Uplifts**

#### **8.5.1 EIM BAA Real-Time Market Neutrality (Real-Time Imbalance Energy Offset - BAA)**

Any charges to the PGE EIM Entity pursuant to Section 29.11(e)(3) of the MO Tariff for EIM BAA real-time market neutrality shall be sub-allocated to Transmission Customers on the basis of Measured Demand.

#### **8.5.2 EIM Entity BAA Real-Time Congestion Offset**

Any charges to the PGE EIM Entity pursuant to Section 29.11(e)(2) of the MO Tariff for the EIM real-time congestion offset shall be allocated to Transmission Customers on the basis of Measured Demand.

#### **8.5.3 EIM Entity Real-Time Marginal Cost of Losses Offset**

Any charges to the PGE EIM Entity pursuant to Section 29.11(e)(4) of the MO Tariff for realtime marginal cost of losses offset shall be sub-allocated to Transmission Customers on the basis of Measured Demand.

#### **8.5.4 EIM Neutrality Settlement**

Any charges to the PGE EIM Entity pursuant to Section 29.11(e)(5) of the MO Tariff for EIM neutrality settlement shall be sub-allocated as follows:

Description Allocation

Neutrality Adjustment (monthly and daily) Measured Demand

Rounding Adjustment (monthly and daily) Measured Demand

#### **8.5.5 Real-Time Bid Cost Recovery**

Any charges to the PGE EIM Entity pursuant to Section 29.11(f) of the MO Tariff for EIM realtime bid cost recovery shall be sub-allocated to Transmission Customers on the basis of Measured Demand.

#### **8.5.6 Flexible Ramping ConstraintProduct**

Any charges or payment to the PGE EIM Entity pursuant to Section 29.11(gp) of the MO Tariff for the Flexible Ramping Constraint Product shall be sub-allocated to Transmission Customers on the basis of Measured Demands as follows.

<u>Description</u>	<u>Allocation</u>
<u>Flexible Ramping Forecasted Movement resource settlement</u>	<u>Measured Demand</u>
<u>Flexible Ramping Forecasted Movement demand allocation</u>	<u>Metered Demand</u>
<u>Daily Flexible Ramping Uncertainty Award (in both the upward and downward directions)</u>	<u>Measured Demand</u>
<u>Monthly Flexible Ramping Uncertainty Award (in both the upward and downward directions)</u>	<u>Measured Demand</u>
<u>Any other Flexible Ramping Product charges or payments</u>	<u>Measured Demand</u>

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**8.5.7 Inaccurate or Late Actual Settlement Quality Meter Data Penalty**

To the extent the PGE EIM Entity incurs a penalty for inaccurate or late actual settlement quality meter data, pursuant to Section 37.11.1 of the MO Tariff, the PGE EIM Entity shall directly assign the penalty to the offending Transmission Customer.

**8.5.8 Other EIM Settlement Provisions**

Any charges to the PGE EIM Entity pursuant to the MO Tariff for the EIM settlement provisions shown in the following table shall be sub-allocated as follows:

<b>Description</b>	<b>Allocation</b>
<u>Invoice Deviation (distribution and allocation)</u>	<u>PGE EIM Entity</u>
<u>Generator Interconnection Process Forfeited Deposit Allocation</u>	<u>PGE EIM Entity</u>
<u>Default Invoice Interest Payment</u>	<u>PGE EIM Entity</u>
<u>Default Invoice Interest Charge</u>	<u>PGE EIM Entity</u>
<u>Invoice Late Payment Penalty</u>	<u>PGE EIM Entity</u>
<u>Financial Security Posting (Collateral) Late Payment Penalty</u>	<u>PGE EIM Entity</u>
<u>Shortfall Receipt Distribution</u>	<u>PGE EIM Entity</u>
<u>Shortfall Reversal</u>	<u>PGE EIM Entity</u>
<u>Shortfall Allocation</u>	<u>PGE EIM Entity</u>
<u>Default Loss Allocation</u>	<u>PGE EIM Entity</u>

### **8.6 MO Tax Liabilities**

Any charges to the PGE EIM Entity pursuant to Section 29.22(a) of the MO Tariff for MO tax liability as a result of the EIM shall be sub-allocated to those Transmission Customers triggering the tax liability.

### **8.7 EIM Transmission Service Charges**

There shall be no incremental transmission charge assessed for transmission use related to the EIM.



Participating Resources and Balancing Authority Area Resources will not incur unreserved use charges solely as a result of EIM Dispatch Instruction.

#### **8.8 Variable Energy Resource Forecast Charge**

Any costs incurred by the PGE EIM Entity related to the preparation and submission of resource Forecast Data for a Transmission Customer with a Non-Participating Resource electing either method (1) or (2), as set forth in Section 4.2.4.2 of this Attachment P, shall be allocated to the Transmission Customer with a Non-Participating Resource electing to use either such method. For a Transmission Customer with a Non-Participating Resource electing method (3), as set forth in Section 4.2.4.2 of this Attachment P, any charges to the PGE EIM Entity pursuant to Section 29.11(j)(1) of the MO Tariff for Variable Energy Resource forecast charges shall be suballocated to the Transmission Customer with a Non-Participating Resource requesting such forecast.

#### **8.9 EIM Payment Calendar**

Pursuant to Section 29.11(l) of the MO Tariff, the PGE 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 PGE EIM Entity shall follow Section 7 of this Tariff for issuing invoices regarding the EIM.

#### **8.10 EIM Residual Balancing Account**

To the extent that MO EIM-related charges or payments to the PGE EIM Entity are not captured elsewhere in Attachment H-1, Schedules 1, 1A, 4, 4R, and 10 of this Tariff, or this Section 8, those charges or payments shall be placed in a balancing account, with interest accruing at the

rate established in 18 C.F.R. § 35.19(a)(2)(iii), until PGE makes a filing with the Commission pursuant to Section 205 of the Federal Power Act proposing an allocation methodology.

### **8.11 Market Validation and Price Correction**

If the MO modifies the PGE EIM Entity settlement statement in accordance with the MO's market validation and price correction procedures in the MO Tariff, the PGE EIM Entity reserves the right to make corresponding or similar changes to the charges and payments sub-allocated under this Attachment P.

### **8.12 Allocation of Operating Reserves**

#### **8.12.1 Payments**

Any payments to the PGE EIM Entity pursuant to Section 29.11(n)(1) of the MO Tariff for operating reserve obligations shall be sub-allocated to Transmission Customers with PGE EIM Participating Resources in the PGE BAA for Operating Hours during which EIM Transfers from the PGE BAA to another BAA occurred. Payments shall be sub-allocated on a ratio-share basis, defined as the proportion of the volume of Operating Reserves provided by a PGE EIM Participating Resource in the PGE BAA dispatched during the Operating Hour compared to the total volume of Operating Reserves provided by all PGE EIM Participating Resources dispatched in the PGE BAA for the Operating Hour.

#### **8.12.2 Charges**

Any charges to the PGE EIM Entity pursuant to Section 29.11(n)(2) of the MO Tariff for operating reserve obligations shall not be sub-allocated to Transmission Customers.

## 9. Compliance

### 9.1 Provision of Data

Transmission Customers with PGE EIM Participating Resources and PGE EIM Participating Resource Scheduling Coordinators are responsible for complying with information requests they receive directly from the EIM market monitor or regulatory authorities concerning EIM activities.

A Transmission Customer with PGE EIM Participating Resources or a Transmission Customer with Non-Participating Resources must provide the PGE EIM Entity with all data necessary to respond to information requests received by the PGE EIM Entity from the MO, the EIM market monitor, or regulatory authorities concerning EIM activities.

If the PGE 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 PGE EIM Entity may disclose such information; provided, however, that upon the PGE EIM Entity learning of the disclosure requirement and, if possible, prior to making such disclosure, the PGE EIM Entity shall notify any affected party of the requirement and the terms thereof. The party can, at its sole discretion and own cost, direct any challenge to or defense against the disclosure requirement. The PGE 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 PGE EIM Entity shall treat all Transmission Customer and Interconnection Customer data and information provided to it as market-sensitive and confidential, unless the PGE EIM Entity

is otherwise allowed or required to disclose. The PGE EIM Entity shall continue to abide by the Commission's Standards of Conduct 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 PGE 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 PGE EIM Entity, the Transmission Customer must immediately and directly communicate the nature of any such limitation to the PGE 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 PGE EIM Entity, as applicable, of outages in accordance with Section 7 of this Attachment P;
- (4) Provide complete, accurate, and timely meter data to the PGE 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 PGE EIM Entity, the Transmission Customer shall be responsible for any consequence on settlement and billing;

(5) Provide information to the PGE 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 P, 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 PGE EIM Entity.

### **9.3 Enforcement**

The PGE EIM Entity may refer a violation of Section 9.2 of this Attachment P to FERC. Violations of these rules of conduct may be enforced by FERC in accordance with FERC's rules and procedures. Nothing in this Section 9 is meant to limit any other remedy before FERC or any applicable judicial, governmental, or administrative body.

## **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), the PGE EIM Entity shall utilize Temporary Schedules 4, 4R, 10, and 11 in accordance with Sections 10.4.1, 10.4.2, 10.4.3, and 10.4.4 of this Attachment P 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 PGE 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 PGE EIM Entity**

If the PGE 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 P, in order to mitigate price exposure during the 180-day period between submission of the notice and the termination effective date, the PGE EIM Entity may invoke the following corrective actions by requesting that the MO:

- (1) prevent EIM Transfers and separate the PGE EIM Entity's BAA from operation of the EIM in the EIM Area; and
- (2) suspend settlement of EIM charges with respect to the PGE EIM Entity. Once such corrective actions are implemented by the MO, the PGE EIM Entity shall utilize Temporary Schedules 4, 4R, 10, and 11 in accordance with Sections 10.4.1, 10.4.2, 10.4.3, and 10.4.4 of this Attachment P.

If the PGE EIM Entity takes action under this Section 10.2, the PGE EIM Entity shall notify the MO and Transmission Customers.

### **10.3 Corrective Actions Taken by the PGE EIM Entity for Temporary Contingencies**

The PGE 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 PGE's BAA) have caused or are in danger of causing an abnormal system condition in PGE'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 PGE EIM Entity are disrupted and prevent the PGE EIM Entity, the PGE EIM Entity Scheduling Coordinator, or a PGE 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 PGE EIM Entity may invoke the following corrective actions by requesting that the MO:

(1) prevent EIM Transfers and separate the PGE 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 PGE EIM Entity.

When corrective action under 10.3.1 (2) is implemented or if the MO Tariff requires the use of these temporary schedules to set an administrative price, the PGE EIM Entity shall utilize Temporary Schedules 4, 4R, 10, and 11 in accordance with Sections 10.4.1, 10.4.2, 10.4.3, and 10.4.4 of this Attachment P.

If the PGE EIM Entity takes action under this Section 10.3, the PGE EIM Entity shall notify the MO and Transmission Customers. The PGE 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, 4R, 10, 11**

##### **10.4.1 Temporary Schedule 4 Energy Imbalance Service**

Energy imbalances will be subject to charges as specified below. The amount of energy imbalance shall be calculated separately for each hour and settlements will occur on a cash basis for each hour's imbalances. Hourly imbalance charges between the Transmission Provider and the Transmission Customer will be net billed for the billing period.

An Energy Imbalance Cost (EIC) shall be determined for each hour.

(1) The EIC will be equal to the market price of energy for each hour calculated pursuant to this Section (c)(1). The hourly EIC will be based upon the Hourly Pricing Proxy.

(2) When the EIC is positive for an hour, (a) PGE will pay the Transmission Customer for excess energy scheduled by the Customer in that hour or (b) the Transmission Customer shall pay PGE for any shortfall in energy scheduled by the Customer in that hour.

(3) When the EIC is negative for an hour, (a) the Transmission Customer will pay PGE for excess energy scheduled by the Customer in that hour or (b) PGE shall pay the Transmission Customer for any shortfall in energy scheduled by the Customer in that hour.



The charges for Energy Imbalance Service are set forth below:

(1) The Transmission Provider shall establish a deviation band of +/- 5.0 percent (with a minimum of 2 MW) of the scheduled transaction to be applied hourly to any energy imbalance that occurs as a result of the Transmission Customer's scheduled transaction(s).

(2) When the EIC is positive:

A. Within the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:

1. PGE shall pay the Transmission Customer at a rate equal to 100% of PGE's hourly EIC at the time of each over-scheduled hour.

2. The Transmission Customer shall pay PGE at a rate equal to 100% of PGE's hourly EIC at the time of each under-scheduled hour.

B. Outside the deviation band, but within a variance of +/-25%, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:

1. PGE shall pay the Transmission Customer at a rate equal to 90% of PGE's hourly EIC at the time of each over-scheduled hour.

2. The Transmission Customer shall pay PGE at a rate equal to 110% of PGE's hourly EIC at the time of each under-scheduled hour.

C. Any deviation between hourly scheduled energy and actual delivery of energy exceeding +/-25%, shall be repaid as a cash settlement as follows:

1. PGE shall pay the Transmission Customer at a rate equal to 75% of PGE's hourly EIC at the time of each over-scheduled hour.

2. The Transmission Customer shall pay PGE at a rate equal to 125% of PGE's hourly EIC at the time of each under-scheduled hour.

(3) When the EIC is negative:

A. Within the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:

1. PGE shall pay the Transmission Customer at a rate equal to 100% of the absolute value of PGE's hourly EIC at the time of each under-scheduled hour.

2. The Transmission Customer shall pay PGE at a rate equal to 100% of the absolute value of PGE's hourly EIC at the time of each over-scheduled hour.

B. Outside the deviation band, but within a variance of +/-25%, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:

1. PGE shall pay the Transmission Customer at a rate equal to 90% of the absolute value of PGE's hourly EIC at the time of each under-scheduled hour.
2. The Transmission Customer shall pay PGE at a rate equal to 110% of the absolute value of PGE's hourly EIC at the time of each over-scheduled hour.

C. Any deviation between hourly scheduled energy and actual delivery of energy exceeding +/-25% shall be repaid as a cash settlement as follows:

1. PGE shall pay the Transmission Customer at a rate equal to 75% of the absolute value of PGE's hourly EIC at the time of each under-scheduled hour.
2. The Transmission Customer shall pay PGE at a rate equal to 125% of the absolute value of PGE's hourly EIC at the time of each over-scheduled hour.

Crediting Mechanism. Excess charges and under payments for energy imbalance and generation imbalance service provided outside the +/- 5.0 percent deviation bands established in Schedules 4 and 10 and outside the +/- 7.5 percent deviation band in Schedule 4R of the Tariff shall be referred to as Penalty Charges. PGE will distribute revenue received from such Penalty Charges as follows:

(1) Revenue from Penalty Charges will be distributed based upon energy imbalance calculations for each hour of a month.

(2) An Offending Customer is one which has incurred Penalty Charges.

(3) A Non-offending Customer is one which has not incurred Penalty Charges during the same hour as the Offending Customer(s).

(4) For each hour, in which there is one or more Offending Customer, the revenues from Penalty Charges will be allocated as follows:

A. The sum of the revenues from Penalty Charges incurred by the Offending Customers will be distributed among all of the Non-offending Customers according to the percentage of power delivered to the Non-offending Customer's load or from the Non-offending Customer's generation that hour.

B. The hourly distributions of revenues from Penalty Charges will be credited to the Non-offending Customers.

#### **10.4.2 Temporary Schedule 4R Retail Energy Imbalance Service**

This Temporary Schedule 4R provides Energy Imbalance Service to Transmission Customers providing Retail Direct Access. Temporary Schedule 4R applies in place of Temporary Schedule 4 for any such customer; Transmission Customers will be charged or paid for imbalance energy under Temporary Schedule 4 or Temporary Schedule 4R but not both.

(1) 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 single hour. 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 Energy Imbalance obligation.

(2) Energy imbalances will be subject to charges as specified below. The amount of energy imbalance shall be calculated separately for each hour and settlements will occur on a cash basis for each hour's imbalances. Hourly imbalance charges between the Transmission Provider and the Transmission Customer will be net billed for the billing period.

(3) An Energy Imbalance Cost (EIC) shall be determined for each hour. The EIC will be equal to the market price of energy for each hour calculated pursuant to this Section (3)A. The hourly EIC will be based upon the Hourly Pricing Proxy.

A. When the EIC is positive for an hour, (a) PGE will pay the Transmission Customer for excess energy delivered by the Customer in that hour or (b) the Transmission Customer shall pay PGE for any shortfall in energy delivered by the Customer in that hour.

B. When the EIC is negative for an hour, (a) PGE will pay the Transmission Customer for any shortfall in energy delivered by the Customer in that hour or (b) the Transmission Customer shall pay PGE for excess energy delivered by the Customer in that hour.

(4) The charges for Energy Imbalance Service are set forth below:

A. The Transmission Provider shall establish a deviation band of +/- 7.5 percent (with a minimum of 2 MW) of the scheduled transaction to be applied hourly to any energy imbalance that

occurs as a result of the Transmission Customer's scheduled transaction(s).

B. When the EIC is positive:

1. Within the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:

a. PGE shall pay the Transmission Customer at a rate equal to 100% of PGE's hourly EIC at the time of each over-scheduled hour.

b. The Transmission Customer shall pay PGE at a rate equal to 100% of PGE's hourly EIC at the time of each under-scheduled hour.

2. Outside the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:

a. PGE shall pay the Transmission Customer at a rate equal to 90% of the PGE's hourly EIC at the time of each over-scheduled hour.

b. The Transmission Customer shall pay PGE at a rate equal to 110% of the PGE's hourly EIC at the time of each under-scheduled hour.

C. When the EIC is negative:

1. Within the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:

a. PGE shall pay the Transmission Customer at a rate equal to 100% of the absolute value of PGE's hourly EIC at the time of each under- scheduled hour.

b. The Transmission Customer shall pay PGE at a rate equal to 100% of the absolute value of PGE's hourly EIC at the time of each over- scheduled hour.

2. Outside the deviation band, any deviation between hourly scheduled energy and actual delivery of energy shall be repaid as a cash settlement as follows:

a. PGE shall pay the Transmission Customer at a rate equal to 90% of the absolute value of PGE's hourly EIC at the time of each under- scheduled hour.

b. The Transmission Customer shall pay PGE at a rate equal to 110% of the absolute value of PGE's hourly EIC at the time of each over- scheduled hour.

(5) Crediting Mechanism. Excess charges and under payments for energy imbalance and generation imbalance service provided outside the +/- 5.0 percent

deviation bands established in Schedules 4 and 10 and outside the +/- 7.5 percent deviation band in Schedule 4R of the Tariff shall be referred to as Penalty Charges. PGE will distribute revenue received from such Penalty Charges as follows:

- A. Revenue from Penalty Charges will be distributed based upon energy imbalance calculations for each hour of a month.
- B. An Offending Customer is one which has incurred Penalty Charges
- C. A Non-offending Customer is one which has not incurred Penalty Charges during the same hour as the Offending Customer(s).
- D. For each hour, in which there is one or more Offending Customer, the revenues from Penalty Charges will be allocated as follows:
  - 1. The sum of the revenues from Penalty Charges incurred by the Offending Customers will be distributed among all of the Non-offending Customers according to the percentage of power delivered to the Non-offending Customer's load or from the Non-offending Customer's generation that hour.
  - 2. The hourly distributions of revenues from Penalty Charges will be credited to the Non-offending Customer.

#### **10.4.3 Temporary Schedule 10 Generator Imbalance Service**

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 single hour (plus real power losses). 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. 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 Transmission Provider may charge a Transmission Customer a penalty for either hourly generator imbalances under this Temporary Schedule 10 or a penalty for hourly energy imbalances under Temporary Schedule 4 for imbalances occurring during the same hour, but not both unless the imbalances aggravate rather than offset each other. To the extent the Interconnection Customer is a different entity than the Transmission Customer and controls the output of a generator located in the Transmission Provider's Control Area, the Interconnection Customer may be subject to charges for Generator Imbalance Service (rather than the Transmission Customer) in accordance with this Temporary Schedule 10.

The Transmission Provider shall establish charges for generator imbalance based on the deviation bands as follows: (i) deviations within +/- 1.5 percent (with a minimum of 2 MW) of the scheduled transaction to be applied hourly to any generator imbalance that occurs as a result of the Transmission Customer's scheduled transaction(s) will be netted on a monthly basis and settled financially, at the end of each month, at the Hourly Pricing Proxy, (ii) deviations greater than +/- 1.5 percent up to 7.5 percent (or greater than 2 MW up to 10 MW) of the scheduled transaction to be applied hourly to any generator imbalance that occurs as a result of the

Transmission Customer's scheduled transaction(s) will be settled financially, at the end of each month, at 110 percent of the Hourly Pricing Proxy for under-scheduling or 90 percent of the Hourly Pricing Proxy for over-scheduling, and (iii) deviations greater than +/- 7.5 percent (or 10 MW) of the scheduled transaction to be applied hourly to any generator imbalance that occurs as a result of the Transmission Customer's scheduled transaction(s) will be settled at 125 percent of the Hourly Pricing Proxy for under-scheduling or 75 percent of the Hourly Pricing Proxy for over-scheduling, except that an intermittent resource will be exempt from this deviation band and will pay the deviation band charges for all deviations greater than the larger of 1.5 percent or 2 MW. An intermittent resource, for the limited purpose of this Schedule is an electric generator that is not dispatchable and cannot store its fuel source and therefore cannot respond to changes in system demand or respond to transmission security constraints.

Notwithstanding the foregoing, deviations from scheduled transactions in order to respond to directives by the Transmission Provider, a balancing authority, or a reliability coordinator shall not be subject to the deviation bands identified above and, instead, shall be settled financially, at the end of the month, at 100 percent of the Hourly Pricing Proxy. Such directives may include instructions to correct frequency decay, respond to a reserve sharing event, or change output to relieve congestion.

For any hour for which Transmission Provider assesses any charge for Generator Imbalance Service under this Temporary Schedule 10 based on 110 percent or 125 percent of the Hourly Pricing Proxy, Transmission Provider shall credit to non-offending Transmission Customers for such hour the amount by which such charge exceeded the Hourly Pricing Proxy.

#### **10.4.4 Temporary Schedule 11 – Real Power Losses**

A transmission customer taking Network Integration Transmission Service, Firm or Non-Firm Point-to-Point Transmission Service shall be responsible for Real Power Losses as provided for in Sections 15.7 and 28.5 of the Tariff. For each hour where the Transmission Provider provides loss service, the Transmission Customer shall compensate the Transmission Provider at a rate equal to the Hourly Pricing Proxy for energy for such hour based on the product of the actual transmission service provided (scheduled service less any curtailments, corrections or adjustments mutually agreed on by the Transmission Provider and the Transmission Customer) during each hour in MWhs and the applicable loss factor provided in Sections 15.7 and 28.5 of the Tariff.