

**PRO FORMA OPEN ACCESS  
TRANSMISSION TARIFF**

**E.ON U.S. LLC,  
ON BEHALF OF ITS OPERATING COMPANIES:**

**LOUISVILLE GAS & ELECTRIC CO.  
KENTUCKY UTILITIES CO.**

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## COMMON SERVICE PROVISIONS

### 1 Definitions

#### 1.1 Affiliate

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

#### 1.2 Ancillary Services

Those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Owner's Transmission System in accordance with Good Utility Practice.

#### 1.3 Annual Transmission Costs

The total annual cost of the Transmission System for purposes of Network Integration Transmission Service shall be the amount calculated in Attachment O.

#### 1.4 Application

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

#### 1.5 Commission

The Federal Energy Regulatory Commission, referred to in this Tariff from time to time as "FERC."

#### 1.6 Completed Application

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

### **1.7 Control Area**

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

1. match, at all times, the power output of the generators within the electric power system(s) and capacity and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);
2. maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;
3. maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and
4. provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice. The term “Control Area Operator” as provided for herein, shall mean the party operating the Control Area.

### **1.8 Curtailment**

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

### **1.9 Delivering Party**

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

### **1.10 Designated Agent**

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

### **1.11 Direct Assignment Facilities**

Facilities or portions of facilities that are constructed by the Transmission Owner 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.

### **1.12 Eligible Customer**

(i) Any electric utility (including the Transmission Owner 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 Owner offer the unbundled transmission service, or pursuant to a voluntary offer of such service by the Transmission Owner.

(ii) Any retail customer taking unbundled transmission service pursuant to a state requirement that the Transmission Owner offer the transmission service, or pursuant to a voluntary offer of such service by the Transmission Owner, is an Eligible Customer under the Tariff.

### **1.13 Facilities Study**

An engineering study to determine the required modifications to the Transmission Owner's Transmission System, including the cost and scheduled completion date

for such modifications that will be required to provide the requested transmission service.

#### **1.14 Feasibility Analysis**

An informal assessment of the nature of, costs of, and construction timeline for any Direct Assignment Facilities and/or Network Upgrades necessary to provide Transmission or Network Integration Transmission Service to a requesting Eligible Customer.

#### **1.15 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.

#### **1.16 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 214(a)(4).

#### **1.17 Interruption**

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

### **1.18 Load Ratio Share**

Ratio of a Transmission Customer's Network Load to the Transmission Owner'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.

### **1.19 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.

### **1.20 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.

### **1.21 Native Load Customers**

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

### **1.22 Network Customer**

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

### **1.23 Network Integration Transmission Service**

The transmission service provided under Part III of the Tariff.

### **1.24 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.

**1.25 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.

**1.26 Network Operating Committee**

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

**1.27 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.

**1.28 Network Upgrades**

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

**1.29 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.

**1.30 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 the seller.

**1.31 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.

**1.32 Part I**

Tariff Definitions contained in Section 1 and Common Service Provisions contained in Sections 2 through 12.

**1.33 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.

**1.34 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.

**1.35 Parties**

Transmission Owner and the Transmission Customer receiving service under the Tariff.

**1.36 Point(s) of Delivery**

Point(s) on the Transmission System where capacity and energy transmitted 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.

**1.37 Point(s) of Receipt**

Point(s) of interconnection on the Transmission System where capacity and energy will be made available to the Transmission Owner 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.

**1.38 Point-To-Point Transmission Service**

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



**1.39 Power Purchaser**

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

**1.40 Pre-Confirmed Application**

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

**1.41 Receiving Party**

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

**1.42 Reliability Coordinator**

The party charged with providing reliability coordination service for the Transmission Owner's system in accordance with the Amended Reliability Coordinator Agreement attached hereto as Attachment Q and any other applicable agreement or arrangements.

**1.43 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.

**1.44 Reserved Capacity**

The maximum amount of capacity and energy that shall be transmitted for the Transmission Customer over the Transmission System between the Point(s) of Receipt and the Point(s) of Delivery, subject to the provisions of the Tariff, particularly Part II hereof. Reserved Capacity shall be expressed in terms of

whole megawatts on a sixty (60) minute interval (commencing on the clock hour) basis.

**1.45 Service Agreement**

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

**1.46 Service Commencement Date**

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

**1.47 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.

**1.48 System Condition**

A specified condition on the Transmission Owner'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.

**1.49 System Impact Study**

An assessment by the Transmission Owner of (i) the adequacy of the Transmission System to accommodate a request for either Firm Point-To-Point Transmission Service or First Revised Sheet No. 22 Network Integration

Transmission Service and (ii) whether any additional costs may be incurred in order to provide transmission service.

**1.50 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.

**1.51 Transmission Customer**

Any Eligible Customer (or its Designated Agent) that (i) executes a Service Agreement, or (ii) requests in writing that Transmission Owner 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.

**1.52 Transmission Owner**

LG&E/KU, the public utility operating companies which: (i) own the Transmission System; (ii) conduct those functions specified herein necessary to ensure the availability of open access transmission service under the Tariff; and (iii) receive payment for Transmission Service as provided for in the Tariff.

**1.53 [Reserved]**

**1.54 Transmission Owner Monthly Transmission System Peak**

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

**1.55 Transmission Service**

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

### **1.56 Transmission System**

The facilities owned, controlled and operated by the Transmission Owner that are used to provide Transmission Service under Part II and Part III of the Tariff.

## **2 Initial Allocation, Renewal Procedures, and Feasibility Analysis Service**

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

For purposes of determining whether existing capability on the 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 when the Service Agreement 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 Owner or elects to purchase capacity and energy from another supplier. If, at the end of the contract term, the 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 Owner whether it will exercise its right of first refusal no less than one year prior to the expiration 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 [the date of the Transmission Owner's filing adopting the reformed rollover language herein in compliance with Order No. 890] 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 [the date of the Transmission Owner's filing adopting the reformed rollover language herein in compliance with Order No. 890]; provided that, the one-year notice requirement shall apply to such service agreements with five years or more left in their terms as of the [date of the Owner's filing adopting the reformed rollover language herein in compliance with Order No. 890].

### **2.3 Feasibility Analysis Service**

At any time before making a new request for Point-to-Point or Network Integration Transmission Service, an Eligible Customer may request that the Transmission Owner perform, or cause to be performed (by a third party at the

Transmission Owner's option), a Feasibility Analysis. If such a request is made, the Feasibility Analysis shall be performed for a flat fee of \$5,000.

Within 15 days of receiving a request for FAS, the Transmission Owner shall tender an FAS Agreement (Attachment R to the OATT) to the requesting Eligible Customer. In order for the FAS request to remain valid, the requesting Eligible Customer shall return an executed FAS Agreement to the Transmission Owner within 15 days of receipt, along with payment of the \$5,000 fee. The Transmission Owner or its designee shall perform Feasibility Analyses in the order in which a completed and executed Feasibility Analysis, together with the \$5,000 fee, is received.

All Feasibility Analyses shall be performed on a non-discriminatory basis. The results of a Feasibility Analysis performed pursuant to this Section 2.3 shall be non-binding on either the requesting Eligible Customer or the Transmission Owner. Any System Impact Study or Facilities Study performed subsequent to a Feasibility Analysis may reach different results.

If the requesting Eligible Customer requests a System Impact Study after the FAS, the Transmission Owner shall credit the \$5,000 FAS fee towards the fee for performing a System Impact Study.

### **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 Owner is required to offer to arrange with the local Control Area operator to provide, as discussed below, and the Transmission Customer is required to purchase, the following Ancillary Services from the Control Area

operator (i) Scheduling, System Control and Dispatch, and (ii) Reactive Supply and Voltage Control from Generation or Other Sources.

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

The Transmission Owner is required to provide, to the extent it is physically feasible to do so from its resources or from resources available to it, Generator Imbalance Service when Transmission Service is used to deliver energy from a generator located within its Control Area. The Transmission Customer using Transmission Service to deliver energy from a generator located within the Transmission Owner's Control Area is required to acquire Generator Imbalance Service, whether from the Transmission Owner, from a third party, or by self-supply.

The Transmission Customer may not decline to purchase Ancillary Services provided by the Transmission Owner unless the Transmission Customer 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 Owner. The Transmission Owner is required

to offer and provide the Ancillary Services as provided for in the Schedules of the Tariff. 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 Owner 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 Owner is a public utility which makes open access transmission service available but is not a Control Area operator, such Transmission Owner may be unable to provide some or all of the Ancillary Services. In this case, the Transmission Owner can fulfill its obligation to provide Ancillary Services by ensuring that it acts 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 Owner 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 9) from a third party or by self-supply when technically feasible.

The Transmission Owner 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 Owner as follows: (1) any offer of a discount made by the Transmission Owner 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 Owner'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 9.

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

Terms and conditions regarding Open Access Same-Time Information System and standards of conduct are set forth in 18 CFR § 37 of the Commission's regulations (Open Access Same-Time Information System and Standards of Conduct for Public Utilities) and 18 CFR § 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.

The Transmission Owner 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 Owner shall post on its OASIS and on the 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 Owner shall also post on OASIS and on the public website an electronic link to a statement of the process by which the rules, standards and practices that are not included in this Tariff shall be added, deleted or otherwise modified. Such process shall set forth the means by which the Transmission Owner 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 Owner deems appropriate.

## **5 Local Furnishing Bonds**

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

This provision is applicable only to Transmission Owners 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 Owner shall not be required to make available 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 Owner’s facilities that would be used in providing such transmission service.

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

(i) If the Transmission Owner 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 the Transmission Owner’s 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 (1) by tendering an application under Section 211 of the Federal Power Act, the Transmission Owner, 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 waiver of 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 Owner shall be required to make available 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 Owner 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) or Independent System Operator (ISO) or other transmission organization approved by the Commission for the operation of transmission facilities also agrees to provide comparable transmission service to the transmission-owning members of such power pool and Regional Transmission Group, RTO, ISO or other transmission organization on similar terms and conditions over facilities used for the transmission of electric energy owned, controlled or operated by the Transmission Customer and over facilities used for the

transmission of electric energy owned, controlled or operated by the Transmission Customer's corporate Affiliates.

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

## **7 Billing and Payment**

### **7.1 Billing Procedure**

Within a reasonable time after the first day of each month, the Transmission Owner shall submit an invoice to the Transmission Customer for the charges for all services furnished under the Tariff during the preceding 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 Owner, or by wire transfer to a bank named by the Transmission.

### **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 CFR § 35.1 9a(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 Owner.

### **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 Owner 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 Owner 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 Owner 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 Owner and the Transmission Customer, the Transmission Owner will continue to ensure that service under the Service Agreement is provided 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 Owner may provide notice to the Transmission Customer of its intention to suspend service in sixty (60) days, in accordance with Commission policy.

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

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

### **8.1 Transmission Revenues**

Include in a separate operating revenue account or sub-account the revenues it receives from Transmission Service associated with Third-Party Sales made by the Transmission Owner under Part II of the Tariff.

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

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

Nothing contained in the Tariff or any Service Agreement shall be construed as affecting in any way the right of the Transmission Owner 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 to exercise its rights under the Federal Power Act and pursuant to the Commission's rules and regulations promulgated thereunder.

## **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 Owner 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 Owner 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 Owner's performance of obligations under this Tariff on behalf of the Transmission Customer, except in cases of negligence or intentional wrongdoing by the Transmission Owner.



## **11 Creditworthiness**

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

## **12 Dispute Resolution Procedures**

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

Any dispute between a Transmission Customer and the Transmission Owner 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 Owner 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.

### **12.2 External Arbitration Procedures**

Any arbitration initiated under the Tariff shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) days of the referral of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk

power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall generally conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association and any applicable Commission regulations or Regional Transmission Group rules.

### **12.3 Arbitration Decisions**

Unless otherwise agreed, the arbitrator(s) shall render a decision within ninety (90) days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the Tariff and any Service Agreement entered into under the Tariff and shall have no power to modify or change any of the above in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act and/or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with the Commission if it affects jurisdictional rates, terms and conditions of service or facilities.

### **12.4 Costs**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable:

(A) 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

(B) one-half the cost of the single arbitrator jointly chosen by the Parties.

### **12.5 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.

## **POINT-TO-POINT TRANSMISSION SERVICE**

### **Preamble**

The Transmission Owner will make available, 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. Transmission Customers shall arrange for such service with the Transmission Owner.

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

### **13.1 Term**

The minimum term of Firm Point-To-Point Transmission Service shall be one 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 reserved 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 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 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 a 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 Owner 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, consistent with the terms of the Schedules. Reservation priorities for existing firm service customers are provided in Section 2.2.

### **13.3 Use of Firm Transmission Service by the Transmission Owner**

The Transmission Owner will be subject to the rates, terms and conditions of Part II of the Tariff when making Third-Party Sales under the Tariff. The Transmission Owner will ensure that separate accounting is maintained, pursuant to Section 8, for any use by the Transmission Owner of the Point-To-Point Transmission Service to make its own Third-Party Sales.

### **13.4 Service Agreements**

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

Point-To-Point Transmission Service pursuant to the Tariff. 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 Owner 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 Owner 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 Owner 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 Owner's

ability to meet prior firm contractual commitments to others, the Transmission Owner 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 Owner for any necessary transmission facility additions pursuant to the terms of Section 27 and the Schedules. To the extent the Transmission Owner can relieve any system constraint by redispatching the Transmission Owner's resources, the Transmission Owner shall do so, provided that the Eligible Customer agrees to compensate the Transmission Owner pursuant to the terms of Section 27 and agrees to either (i) compensate the Transmission Owner for any necessary transmission facility additions or (ii) accept the service subject to a biennial reassessment by the Transmission Owner 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 Owner's Transmission System, or a portion thereof, is required to maintain reliable operation of such system, Curtailments will be made on a non-discriminatory basis to the transaction(s) that effectively relieve the constraint. If multiple transactions require Curtailment, to the extent practicable and consistent with Good Utility Practice, the Control Area operator 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 Owner'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 Control Area operator 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 Control Area operator where applicable. However, the Control Area operator reserves the right to Curtail, in whole or in part, any Firm Transmission Service provided under the Tariff when the Control Area operator in its sole discretion determines that an emergency or other unforeseen condition will impair or degrade the reliability of the Transmission System. The Control Area Operator will notify all affected Transmission Customers through the scheduling function of the OASIS in a timely manner of any scheduled Curtailments. Such Curtailments may also be ordered by the Reliability Coordinator.

### **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 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 Owner shall make service available for 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 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 Receipt. Points of Receipt and corresponding capacity reservations shall be as mutually agreed upon by the Parties for Short-Term Firm Transmission. Each Point of Delivery at which firm transfer capability is reserved by the Transmission Customer shall be set forth in the Firm Point-To-Point Service Agreement for Long-Term Firm Transmission Service along with a corresponding capacity reservation associated with each Point of Delivery. Points of Delivery and corresponding capacity reservations shall be as mutually agreed upon by the Parties for Short-Term Firm Transmission. The greater of either (1) the sum of the capacity reservations at the Point(s) of Receipt, or (2) the sum of the capacity reservations at the Point(s) of Delivery shall be the Transmission Customer's Reserved Capacity. The Transmission Customer will be billed for its Reserved Capacity under the terms of

Schedule 7. The Transmission Customer may not exceed its firm capacity reserved at each Point of Receipt and each Point of Delivery except as otherwise specified in Section 22. The Transmission Owner shall specify the rate treatment and all related terms and conditions applicable in the event that a Transmission Customer (including Third-Party Sales by the Transmission Owner) 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 Owner no later than 10:00 a.m. EST (Eastern Standard Time) of the day prior to commencement of such service. Schedules submitted after 10:00 a.m. EST will be accommodated, if practicable. Hour-to-hour schedules of any capacity and energy that is to be delivered must be stated in increments of 1,000 kW per hour. Transmission Customers within the Transmission Owner'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 before the start of the next clock hour provided that the Delivering Party and Receiving Party also agree to the schedule modification. The Transmission Owner will furnish to the Delivering Party's system operator, hour-to-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 Owner, and the Transmission Owner shall have the right to adjust accordingly the schedule for capacity and energy to be received and to be delivered.

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

### **14.1 Term**

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

### **14.2 Reservation Priority**

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

reserved shorter term service have the right of first refusal to match any longer term request before being preempted. A longer term competing request for Non-Firm Point-To-Point Transmission Service will be granted if the Eligible Customer with the right of first refusal does not agree to match the competing request: (a) immediately for hourly Non-Firm Point-To-Point Transmission Service after notification by the Transmission Owner; 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 Owner. 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 Owner**

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

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

Schedules for Non-Firm Point-To-Point Transmission Service must be submitted to the Transmission Owner no later than 2:00 p.m. EST of the day prior to commencement of such service. Schedules submitted after 2:00 p.m. EST will be accommodated, if practicable. Hour-to-hour schedules of energy that is to be

delivered must be stated in increments of 1,000 kW per hour. Transmission Customers within the Transmission Owner'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 before the start of the next clock hour provided that the Delivering Party and Receiving Party also agree to the schedule modification. The Transmission Owner will furnish to the Delivering Party's system operator, hour-to-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 Owner, and the Transmission Owner 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 Control Area operator 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 the Transmission System. The Control Area Operator 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 nondesignated resources or (5) transmission service for Firm Point-to-Point Transmission Service during conditional curtailment periods as described in Section 15.4. The Control Area Operator also will discontinue or reduce service made available 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 Control Area operator will provide advance notice of Curtailment or Interruption where such notice can be provided consistent with Good Utility Practice.

## **15 Service Availability**

### **15.1 General Conditions**

The Transmission Owner will make available Firm and Non-Firm Point-To-Point Transmission Service over, on or across the 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 Owner's specific methodology for assessing available transfer capability posted on the Transmission Owner's OASIS (Section 4) is contained in Attachment C of the Tariff. In the event sufficient transfer capability may not exist to accommodate a request for Firm Transmission Service, the Transmission Owner will respond by performing a System Impact Study.

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

If the Transmission Owner 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 Owner shall file with the Commission, within thirty (30) days after the date the Transmission Customer provides written notification directing the Transmission Owner to file, an unexecuted Point-To-Point Service Agreement containing terms and conditions deemed appropriate by the Transmission Owner for such requested Transmission Service. The Transmission Owner shall commence providing Transmission Service subject to the Transmission Customer agreeing to (i) compensate the Transmission Owner 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 Owner determines that a Completed Application for Firm Point-To-Point Transmission Service cannot be accommodated because of insufficient capability on the Transmission System, the Transmission Owner 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 Owner for such costs pursuant to the terms of Section 27. The Transmission Owner will follow Good Utility Practice and the planning obligations in Attachment K in assessing the need for new facilities and with respect to the design and construction of such facilities to be undertaken by the Transmission Owner. The obligation applies only to those facilities that the Transmission Owner has the right to expand or modify.
- (b) If the Transmission Owner determines that a Completed Application for Long-Term Firm Point-To-Point Transmission Service cannot be accommodated because of insufficient capability on the Transmission System, the Transmission Owner will use due diligence to provide redispatch from its own resources until (i) Network Upgrades are completed for the Transmission Customer, (ii) the Transmission Owner determines through a biennial reassessment that the redispatch can no

longer be provided reliably, or (iii) the Transmission Customer terminates the service because of redispatch changes resulting from the reassessment.

The Transmission Owner shall not unreasonably deny self-provided redispatch or redispatch arranged by the Transmission Customer from a third party resource.

- (c) If the Transmission Owner determines that a Completed Application for Long-Term Firm Point-To-Point Transmission Service cannot be accommodated because of insufficient capability on the Transmission System, the Transmission Owner will offer the Firm Transmission Service with the condition that it 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 Owner will use due diligence to provide the service until (i) Network Upgrades are completed for the Transmission Customer, (ii) the Transmission Owner determines through a biennial reassessment that such service can no longer be provided reliably, 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 Owner may defer the commencement of service until it completes construction of new transmission facilities or upgrades needed to provide Firm Point-To-Point Transmission Service whenever the Transmission

Owner 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 Owner is not obligated to provide Real Power Losses. The Transmission Customer is responsible for replacing losses associated with all transmission service calculated consistent with the terms of the Tariff. The applicable Real Power Loss factor shall not exceed 3% of the hourly scheduled load, as provided for in Schedule 11.

#### **15.8 Service Agreements, GFAs, or OASIS Reservations in Effect as of December 28, 2004.**

Pursuant to the terms of the Midwest ISO's Transmission Owner's Agreement Article V, as interpreted in *Louisville Gas & Electric Co., et al.* 114 FERC ¶ 61,282 (2006), all transmission agreements, GFAs, and OASIS reservations in place as of December 28, 2004 will receive service subject to the "service and pricing that they would have been entitled to receive, absent Applicants' withdrawal," (*Id.* at P 45) until said agreements, GFAs, or OASIS reservations terminate.. The transmission agreements, GFAs and OASIS reservations covered by this hold harmless requirement are listed at Attachment E. For those

agreements, GFAs, or OASIS reservations under which service has not terminated prior to Transmission Owner's withdrawal from the Midwest ISO, this "hold harmless" requirement will be implemented as follows:

- a. "Drive-In" to the Midwest ISO: With respect to any transaction in which a customer sells electricity generated with a source in the Transmission Owner's control area and a sink in the Midwest ISO: (i) the Applicants shall waive Tariff and ancillary services billings, as applicable, which otherwise would have been incurred to transmit electricity to the Midwest ISO/LG&E/KU interface; and (ii) the customer shall continue to be responsible for all Midwest ISO Charges incurred to deliver such electricity to any point within the Midwest ISO beyond the Midwest ISO/LG&E-KU interface.
- b. "Drive-Out" of the Midwest ISO: With respect to any transaction in which a customer purchases electricity from a source in the Midwest ISO for delivery to such party's load interconnected with the Transmission System: (i) Applicants shall credit their Tariff and ancillary services billings, as applicable, to the customer by an amount equal to the Midwest ISO Charges which the customer incurs to deliver such purchased electricity to the Midwest ISO/LG&E/KU interface, (provided, however, that no credit shall be applied for any Midwest ISO Charge for service that is not provided and charged by Applicants, *i.e.*, where there would be no pancaked charge), less any revenue that the customer receives as a Transmission Owner under the Midwest ISO; and (ii) the customer shall continue to be responsible for the Tariff and ancillary services billings, as applicable, incurred to deliver such electricity to their loads on the Applicants' transmission system.
- c. For transactions that source in a Control Area other than the Midwest ISO and sink in the Transmission Owner's Control Area these customers will still only pay the Transmission Owner's Tariff and ancillary services charges.

## **16 Transmission Customer Responsibilities**

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

Point-To-Point Transmission Service shall be made available by the Transmission Owner only if the following conditions are satisfied by the Transmission Customer, as determined by the Transmission Owner:

- (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 Owner 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 Owner's transmission 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.

#### **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 Owner, notification to the Transmission Owner identifying such systems and authorizing them to schedule the capacity and energy to be transmitted by the Transmission Owner 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 Owner will undertake reasonable efforts to assist the Transmission Customer in making such arrangements, including without limitation, providing any information or data required by such other electric system pursuant to Good Utility Practice.

## **17 Procedures for Arranging Firm Point-To-Point Transmission Service**

### **17.1 Application**

A request for Firm Point-To-Point Transmission Service for periods of one year or longer must contain a written Application to: Director, Transmission, P.O. Box 32020, Louisville, Kentucky 40232, at least sixty (60) days in advance of the calendar month in which service is to commence. The Transmission Owner 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 OASIS. Prior to implementation of the OASIS, a Completed Application may be submitted by (i) transmitting the required information to the Transmission Owner by telefax, or (ii) providing the information by telephone over the Transmission Owner's time recorded telephone line. Each of these methods 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 Owner 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 applicable seams and information sharing agreements. The Transmission Owner 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 transfer capability requested for each Point of Receipt and each Point of Delivery on the Transmission Owner's Transmission System. Customers may combine their requests for service in order to satisfy the minimum transfer capability 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 Owner can provide the requested Transmission Service; and
- (x) Any additional information required by the Transmission Owner's planning process established in Attachment K.

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

### **17.3 Deposit**

A Completed Application for 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 Owner 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 Owner 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 Owner if the Transmission Owner 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 Owner to the extent such costs have not already been recovered by the Transmission Owner from the Eligible Customer. The Transmission Owner 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 Owner's account.

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

If an Application fails to meet the requirements of the Tariff, the Transmission Owner shall notify the entity requesting service within fifteen (15) days of receipt of the reasons for such failure. The Transmission Owner will attempt to remedy



minor deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Owner 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 Owner shall make a determination of available transfer capability as required in Section 15.2. The Transmission Owner 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 Owner 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 Owner 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 Owner 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 Owner that 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**

### **18.1 Application**

Eligible Customers seeking Non-Firm Point-To-Point Transmission Service must submit a Completed Application to the Transmission Owner. Applications should be submitted by entering the information listed below on the Transmission Owner's OASIS. Prior to implementation of the OASIS, a Completed Application may be submitted by (i) transmitting the required information to the Transmission Owner by telefax, or (ii) providing the information by telephone over the Transmission Owner'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.

If Transmission Service is provided under an umbrella Service Agreement for Non-Firm Point-To-Point Transmission Service, only the information listed in subsections (i), (ii), and (iii) will be required in the Application. The remaining information listed in subsections (iv) and (v) will be required when a capacity

reservation is requested. In addition to the information specified above, when required to properly evaluate system conditions, the Transmission Owner 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 Owner 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 seams and transmission information sharing agreements. The Transmission Owner 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 Owner 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 EST the day before service is to commence. Requests for service received later than 2:00 p.m. EST prior to the day service is scheduled to commence will be

accommodated if practicable. Requests for hourly service for the next hour may be tendered by telephone or fax; however, the Transmission Customer must submit a pre confirmed request on OASIS prior to one hour after the Transmission Service has commenced.

#### **18.4 Determination of Available Transfer Capability**

Following receipt of a tendered schedule, the Transmission Owner will make a determination on a non discriminatory basis of available transfer capability pursuant to Section 15.2. Such determination shall be made as soon as reasonably practicable after receipt, but not later than the following time periods for the following terms of service (i) thirty (30) minutes for hourly service; (ii) thirty (30) minutes for daily service, (iii) four (4) hours for weekly service; and (iv) two (2) days for monthly service.

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

#### **19.1 Notice of Need for System Impact Study**

After receiving a request for service, the Transmission Owner shall determine on a nondiscriminatory basis whether a System Impact Study is needed. A description of the Transmission Owner's methodology for completing a System Impact Study is provided in Attachment D. If the Transmission Owner 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 Owner if it elects to have the Transmission Owner study redispach 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 Owner 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 Owner for the actual costs of the System Impact Study, including any costs incurred by the Transmission Owner with performing its functions for 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 Owner 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 Owner'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 Owner 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 Owner to accommodate the requests for service, the costs of that study shall be pro-rated among the Eligible Customers.

- (iii) For System Impact Studies, the Transmission Owner shall record the cost of the System Impact Studies pursuant to Section 20.

### **19.3 System Impact Study Procedures**

Upon receipt of an executed System Impact Study Agreement, the Transmission Owner 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 Owner'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 Owner possesses information indicating that any resource outside the Transmission Owner's Control Area could relieve the constraint, each such resource shall be identified in the System Impact Study. In the event that the Transmission Owner 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 Owner 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 Owner 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 Procedure for Clustering System Impact Study Requests**

If an Eligible Customer or Eligible Customers wish to have their System Impact Studies clustered together, the following procedures will be implemented. On August 1<sup>st</sup> each year the Transmission Owner will announce via OASIS posting the opening of a “clustering window” which will close on January 31<sup>st</sup>. Any Eligible Customer who executes a System Impact Study Agreement during the clustering window, and indicates that its System Impact Study should be clustered with others, will be held until the end of the clustering window. The Transmission Owner will commence the clustered System Impact Study on March 1<sup>st</sup> and will



use due diligence to complete the clustered System Impact Study within a sixty (60) day period. On February 1<sup>st</sup> each year the Transmission Owner will announce via OASIS posting the opening of a second “clustering window” which will close on July 31<sup>st</sup>. Any Eligible Customer who executes a System Impact Study Agreement during the clustering window, and indicates that its System Impact Study should be clustered with others, will be held until the end of the clustering window. The Transmission Owner will commence that clustered System Impact Study on September 1<sup>st</sup> and will use due diligence to complete the clustered System Impact Study within a sixty (60) day period.

System Impact Studies that are clustered shall be treated as a single System Impact Study for all purposes, and shall be performed pursuant to a single System Impact Study Agreement entered into between the Transmission Owner and the Eligible Customers that have submitted service requests that have been clustered. Unless otherwise stated in such agreement, the cost for the completion of the System Impact Study shall be allocated in equal shares based on the number of transmission service requests to be included in the clustered System Impact Study (*e.g.*, if there are ten transmission service requests to be studied, each transmission service request shall be allocated 10% of the cost of the study).

Facilities Studies that are clustered shall be treated as a single Facilities Study for all purposes, and shall be performed pursuant to a single Facilities Study Agreement entered into between the Transmission Owner and the Eligible Customers that have submitted service requests that have been clustered. Unless otherwise stated in such agreement, the cost for the completion of the Facilities Study shall be allocated in equal shares based on the number of transmission service requests to be included in the clustered System Impact Study (*e.g.*, if there are ten transmission service requests to be studied, each transmission service request shall be allocated 10% of the cost of the study).

An Eligible Customer can opt out of a cluster only during the period of time after the completion of the applicable System Impact Study and before the applicable Facilities Study. In the event that an Eligible Customer opts out of a cluster, the Eligible Customer who is opting out shall still be responsible for its

share of the costs for the System Impact Study, and the costs associated with the  
Facilities Study will be allocated in equal shares among the remaining

transmission service requests. The Eligible Customer that opted out of the cluster may elect to enter the study queue by requesting a new individual study or as part of a new cluster.

Unless otherwise agreed, the Transmission Owner shall not be required to undertake any Transmission System upgrades or additions identified by a clustered Facilities Study unless all of the Eligible Customers for which the studies have been clustered execute Service Agreements, under which they are obligated to pay the total costs of such upgrades or additions, and to provide the required security.

Any Eligible Customers who choose to have their transmission service requests clustered bear the risk that the System Impact Study queue will continue while the clustering window is pending. If an Eligible Customer chooses to have its transmission service request clustered, such Eligible Customer may not concurrently request an individual System Impact Study. If an Eligible Customer requests and receives an individual System Impact Study prior or subsequent to participating in a clustered System Impact Study, such Eligible Customer shall bear the costs of its individual System Impact Study, as well as its share of the clustered System Impact Study.

## **19.5 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 Owner, 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 Owner for the actual costs of the Facilities Study, including any costs incurred by the Transmission Owner with respect to performing its functions for 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 Owner 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 Owner will use due diligence to complete the required Facilities Study within a sixty (60) day period. If the Transmission Owner is unable to complete the Facilities Study in the allotted time period, the Transmission Owner shall notify the Transmission Customer and provide an estimate of the time needed to reach a final determination along with an explanation of the reasons that additional time is required to complete the study. When completed, the Facilities Study will include a good faith estimate of (i) the cost of Direct Assignment Facilities to be charged to the Transmission Customer, (ii) the Transmission Customer's appropriate share of the cost of any required Network Upgrades as determined pursuant to the provisions of Part II of the Tariff, and (iii) the time required to complete such construction and initiate the requested service. The Transmission Customer shall provide the Transmission Owner with a letter of credit or other reasonable form of security acceptable to the Transmission Owner equivalent to the costs of new facilities or upgrades consistent with commercial practices as established by the Uniform Commercial Code. The Transmission

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.

#### **19.6 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 Owner 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 Owner shall use due diligence to add necessary facilities or upgrade its Transmission System within a reasonable time consistent herewith. The Transmission Owner will not be required to 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 Owner determines that adequate transfer capability to satisfy the full amount of a Completed Application for Firm Point-To-Point Transmission Service is not available, the Transmission Owner nonetheless shall be obligated to make available 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 Owner 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 Owner 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 Owner 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 Owner 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 Owner 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 19.5 require the Transmission Owner to use due diligence to meet 60-day study completion deadlines for System Impact Studies and Facilities Studies, respectively.

- (i) The Transmission Owner 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 Owner 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 Owner shall consider all System Impact Studies and Facilities Studies that were completed 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 Owner may provide an explanation in the notification filing to the Commission if the Transmission Owner believes there are extenuating circumstances that prevented either entity from meeting the 60-day study completion deadlines.
- (iii) An operational penalty will be incurred if ten (10) percent or more of non-Affiliates' System Impact or Facilities Studies are completed 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 Owner's notification filing to the Commission. The operational penalty will continue to be assessed each quarter until at least ninety (90) percent of all non-Affiliates' System Impact and Facilities Studies are completed within the 60-day deadline.

- (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 it takes to complete that study beyond the 60-day deadline.

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

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

If any event occurs that will materially affect the time for completion of new facilities, or the ability to complete them, the Transmission Owner shall promptly notify the Transmission Customer. In such circumstances, the Transmission Owner 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 Owner 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 Owner 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 Owner 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 Owner 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 Owner shall promptly tender a Service Agreement for Non-Firm Point-To-Point Transmission Service providing for the service. In the event the Transmission Owner 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 Owner 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 regulation 18 CFR

35.19a(a)(2)(iii). However, the Transmission Customer shall be responsible for all prudently incurred costs by the Transmission Owner through the time construction was suspended.

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

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

The Transmission Owner 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 Owner 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 Owner shall have the right to coordinate construction on its own system with the construction required by others. The Transmission Owner, 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 Owner 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 Owner of the 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.

## **22 Changes in Service Specifications**

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

The Transmission Customer taking Firm Point-To-Point Transmission Service may make a request to the Transmission Owner that transmission service be made available 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. Service provided over Secondary Receipt and Delivery Points will be nonfirm 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 Owner on behalf of its Native Load Customers. 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. 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. 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**

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

Subject to Commission approval of any necessary filings, 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 not exceed the higher of (i) the original rate paid by Reseller, (ii) the Transmission Owner's maximum rate on file at the time of the assignment, or (iii) the Reseller's opportunity cost capped at the Transmission Owner's cost of

expansion; provided that, for service prior to October 1, 2010, compensation to Resellers shall be at rates established by the Reseller and the Assignee.

The Assignee must execute a service agreement with the Transmission Owner governing reassignments of transmission service prior to the date on which the reassigned service commences. The Transmission Owner shall charge the Reseller, as appropriate, the rate stated in Reseller's Service Agreement with the Transmission Owner or the associated OASIS schedule and credit the Reseller with the price reflected in the Assignee's Service Agreement with the Transmission Owner or the associated OASIS schedule; provided that such credit shall be reversed in the event of a non-payment by the 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 Owner 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 Owner 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 Owner's generation, transmission, or distribution systems. The Assignee shall compensate the Transmission Owner 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 Owner and the Reseller through an amendment to the Service Agreement.

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

In accordance with Section 4, all sales or assignments of capacity must be conducted through or otherwise posted on the Transmission Owner's OASIS on or before the date the reassigned service commences, and are subject to Section 23.1. Resellers may also use the Transmission Owner's OASIS to post transfer capability available for resale.

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

### **24.1 Transmission Customer Obligations**

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

### **24.2 Transmission Owner Access to Metering Data**

The Transmission Owner 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 Owner 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 Owner shall use Part II of the Tariff to make its Third-Party Sales. The Transmission Owner shall account for such use at the applicable Tariff rates, pursuant to Section 8.

### **26 Stranded Cost Recovery**

The Transmission Owner 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 and Order No. 888-A, and any subsequent revisions thereto. However, the Transmission Owner must separately file any specific proposed stranded cost charge under Section 205 of the Federal Power Act.

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

Whenever a System Impact Study is performed by the Transmission Owner 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 the Schedules. Whenever a System Impact Study performed by the Transmission Owner identifies capacity constraints that may be relieved by redispatching



the Transmission Owner resources, the Transmission Customer shall be responsible for the redispatch costs to the extent consistent with the Schedules.

## **NETWORK INTEGRATION TRANSMISSION SERVICE**

### **Preamble**

The Transmission Owner will make available 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 Owner 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 nondesignated loads will be provided pursuant to the applicable terms and conditions of Part II of the Tariff.

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

### **28.1 Scope of Service**

Network Integration Transmission Service is a transmission service that allows Network Customers to efficiently and economically utilize their Network Resources (as well as other non-designated generation resources) to serve their Network Load located in the 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.

## **28.2 Transmission Owner Responsibilities**

The Transmission Owner will plan (subject to regional plans and coordination), construct, operate and maintain the Transmission System in accordance with Good Utility Practice and its planning obligations in Attachment K in order to make available to the Network Customer Network Integration Transmission Service over the Transmission Owner's Transmission System. The Transmission Owner, 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 Owner to calculate available transfer capability. The Transmission Owner shall include the Network Customer's Network Load in the Transmission System planning and shall, consistent with Good Utility Practice, 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 Owner's delivery of its own generating and purchased resources to its Native Load Customers.

## **28.3 Network Integration Transmission Service**

The Transmission Owner will make available firm transmission service over the 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 Owner's use of the Transmission System to reliably serve its Native Load Customers.

## **28.4 Secondary Service**

The Network Customer may use the 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 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 Owner is not obligated to provide Real Power Losses. The Network Customer is responsible for replacing losses associated with all transmission service as calculated by the Transmission Owner. The applicable Real Power Loss factor is 3% of the hourly scheduled load, as provided for in Schedule 11.

## **28.6 Restrictions on Use of Service**

The Network Customer shall not use Network Integration Transmission Service for (i) sales of capacity and energy to non- designated loads, or (ii) direct or indirect provision of transmission service by the Network Customer to third parties. All Network Customers taking Network Integration Transmission Service shall use Point-To-Point Transmission Service under Part II of the Tariff for any Third-Party Sale which requires use of the Transmission System. The Transmission Owner 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.

## **29 Initiating Service**

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

Subject to the terms and conditions of Part III of the Tariff, the Transmission Owner will make available 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 Owner complete the technical arrangements set forth in Sections 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 Owner file a proposed unexecuted Service Agreement with the Commission, and (iv) the Eligible Customer executes a Network Operating Agreement with the Transmission Owner pursuant to Attachment G.

### **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 Owner 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 Owner's OASIS. Prior to implementation of the OASIS, a Completed Application may be submitted by (i) transmitting the required information to the Transmission Owner by telefax, or (ii) providing the information by telephone over the Transmission Owner's time recorded telephone line. Each of these methods 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 Owner 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 Control Area, where only a portion of unit output is designated as a Network Resource

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

- Identification of the Network Resource as an off-system resource;
- Amount of Power to which the customer has rights;
- Identification of the control area from which the power will originate;
- Delivery points to the Transmission Owner'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; and
  - 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 Owner
  - 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 the Transmission Owner's planning process established in Attachment K.

Unless the Parties agree to a different time frame, the Transmission Owner 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 Owner shall notify the Eligible Customer requesting service within fifteen (15) days of receipt and specify the reasons for such failure. Wherever possible, the Transmission Owner will attempt to remedy deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Owner 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 Owner shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

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

Network Integration Transmission Service shall not commence until the Transmission Owner and the Network Customer, or a third party at the Transmission Owner's option, 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 Owner 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 Owner'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 Owner will file Service Agreements with the Commission in compliance with applicable Commission regulations.

### **30 Network Resources**

#### **30.1 Designation of Network Resources**

Network Resources shall include all generation owned, purchased or leased by the Network Customer designated to serve Network Load under the Tariff. Network Resources may not include resources, or any portion thereof, that are committed for 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. 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 Owner with as much advance notice as practicable. A designation of a new Network Resource must be made through the Transmission Owner'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 Owner 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 Owner through OASIS as soon as reasonably practicable, but not

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

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

As part of a temporary termination, a Network Customer may only redesignate the same resource that was originally designated, or a portion thereof. Requests to redesignate a different resource and/or a resource with increased capacity will be deemed deficient and the Transmission Owner 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 Owner'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 changes in the operation of a Transmission Customer's Network Resources at the request of the Control Area Operator 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 Owner'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 Owner's Transmission System by either obtaining Point-to-Point Transmission Service or utilizing secondary service pursuant to Section 28.4. The Transmission Owner 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 Owner'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 Control Area Operator 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 Owner.

### **30.6 Transmission Arrangements for Network Resources Not Physically Interconnected With The Transmission Owner**

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 Owner's Transmission System. The Transmission Owner 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 Owner'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 Owner'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 Owner'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 Owner, to serve its power and transmission customers. For facilities added by the Network Customer subsequent to July 13, 2007, the Network Customer shall receive credit for such transmission facilities added if such facilities are integrated into the operations of the Transmission Owner'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 Owner, would be eligible for inclusion in the Transmission Owner's annual transmission revenue requirement. 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**

### **31.1 Network Load**

The Network Customer must designate the individual Network Loads on whose behalf the Transmission Owner will make available Network Integration

Transmission Service. The Network Loads shall be specified in the Service Agreement.

### **31.2 New Network Loads Connected With the Transmission Owner**

The Network Customer shall provide the Transmission Owner with as much advance notice as reasonably practicable of the designation of new Network Load that will be added to the Transmission System. A designation of new Network Load must be made through a modification of service pursuant to a new Application. The Transmission Owner 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 Owner**

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 Owner. To the extent that the Network Customer desires to obtain transmission service for a load outside the Transmission Owner'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 Owner's Transmission System and a Network Load, the Network Customer shall provide the Transmission Owner 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 Owner and charged to the Network Customer as reflected in the Service Agreement. However, the Transmission Owner must treat any requested change in Network Integration Transmission Service in a non discriminatory manner.

#### **31.6 Limitations on Charges and Cost Responsibilities**

**Bundled Load:** To the extent that the Transmission Owner takes Network Integration Transmission Service to serve its bundled load, the Transmission Owner shall not pay charges pursuant to Schedules 1 through 6 nor Schedule 9.

#### **31.7 Annual Load and Resource Information Updates**

The Network Customer shall provide the Transmission Owner 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 Owner's planning process in Attachment K. The Network Customer also shall provide the Transmission Owner 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 Owner's ability to provide reliable service.

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

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

After receiving a request for service, the Transmission Owner shall determine on a nondiscriminatory basis whether a System Impact Study is needed. A description of the Transmission Owner's methodology for completing a System Impact Study is provided in Attachment D. If the Transmission Owner 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 Owner 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 Owner for the actual costs of the System Impact Study, including any costs incurred by the Transmission Owner with performing its functions for 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 Owner 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 Owner'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 Owner 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 to accommodate the service requests, the costs of that study shall be pro-rated among the Eligible Customers.
- (iii) The Transmission Owner 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 Owner 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 Owner's control area that can significantly contribute toward relieving system constraint and (2) provide a measurement of each resource's impact on the system constraint. If the Transmission Owner possesses information that any resource outside its Control Area could relieve the constraint, it shall identify each resource in the System Impact Study. In the event that the Transmission Owner 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 Owner 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 Owner 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 either (i) a determination that no System Impact Study is needed, or (ii) the completion of the System Impact Study and a determination that no Facilities Study is needed, 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 Owner, 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 Owner for the actual costs of the Facilities Study, including any costs incurred by the Transmission Owner with performing the respective functions for 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 Owner 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 Owner will use due diligence to complete the required Facilities Study within a sixty (60) day period. If the Transmission Owner is unable to complete the Facilities Study in the allotted time period, the Transmission Owner 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 Owner with a letter of credit or other reasonable form of security acceptable to the Transmission Owner 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 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 Part III of the Tariff.

### **32.6 Procedure for Clustering System Impact Study Requests**

If an Eligible Customer or Eligible Customers wish to have their System Impact Studies clustered together, the following procedures will be implemented. On August 1<sup>st</sup> each year the Transmission Owner will announce via OASIS posting the opening of a "clustering window" which will close on January 31<sup>st</sup>.

Any Eligible Customer who executes a System Impact Study Agreement during the clustering window, and indicates that its System Impact Study should be clustered with others, will be held until the end of the clustering window. The Transmission Owner will commence the clustered System Impact Study on March 1<sup>st</sup> and will use due diligence to complete the clustered System Impact Study within a sixty (60) day period. On February 1<sup>st</sup> each year the Transmission Owner will announce via OASIS posting the opening of a second “clustering window” which will close on July 31<sup>st</sup>. Any Eligible Customer who executes a System Impact Study Agreement during the clustering window, and indicates that its System Impact Study should be clustered with others, will be held until the end of the clustering window. The Transmission Owner will commence that clustered System Impact Study on September 1<sup>st</sup> and will use due diligence to complete the clustered System Impact Study within a sixty (60) day period.

System Impact Studies that are clustered shall be treated as a single System Impact Study for all purposes, and shall be performed pursuant to a single System Impact Study Agreement entered into between the Transmission Owner and the Eligible

Customers that have submitted service requests that have been clustered. Unless otherwise stated in such agreement, the cost for the completion of the System Impact Study shall be allocated in equal shares based on the number of transmission service requests to be included in the clustered System Impact Study (*e.g.*, if there are ten transmission service requests to be studied, each transmission service request shall be allocated 10% of the cost of the study). Facilities Studies that are clustered shall be treated as a single Facilities Study for all purposes, and shall be performed pursuant to a single Facilities Study Agreement entered into between the Transmission Owner and the Eligible Customers that have submitted service requests that have been clustered. Unless otherwise stated in such agreement, the cost for the completion of the Facilities Study shall be allocated in equal shares based on the number of transmission service requests to be included in the clustered System Impact Study (*e.g.*, if there are ten transmission service requests to be studied, each transmission service request shall be allocated 10% of the cost of the study).

An Eligible Customer can opt out of a cluster only during the period of time after the completion of the applicable System Impact Study and before the applicable Facilities Study. In the event that an Eligible Customer opts out of a cluster, the Eligible Customer who is opting out shall still be responsible for its share of the costs for the System Impact Study, and the costs associated with the Facilities Study will be allocated in equal shares among the remaining transmission service requests. The Eligible Customer that opted out of the cluster

may elect to enter the study queue by requesting a new individual study or as part  
of a new cluster.



Unless otherwise agreed, the Transmission Owner shall not be required to undertake any Transmission System upgrades or additions identified by a clustered Facilities Study unless all of the Eligible Customers for which the studies have been clustered execute Service Agreements, under which they are obligated to pay the total costs of such upgrades or additions, and to provide the required security.

Any Eligible Customers who choose to have their transmission service requests clustered bear the risk that the System Impact Study queue will continue while the clustering window is pending. If an Eligible Customer chooses to have its transmission service request clustered, such Eligible Customer may not concurrently request an individual System Impact Study. If an Eligible Customer requests and receives an individual System Impact Study prior or subsequent to participating in a clustered System Impact Study, such Eligible Customer shall bear the costs of its individual System Impact Study, as well as its share of the clustered System Impact Study.

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

#### **33.1 Procedures**

Prior to the Service Commencement Date, the Control Area Operator 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. The Parties will implement such programs during any period when the Control Area, determines that a system contingency exists and such procedures are necessary to alleviate such

contingency. The Control Area Operator will notify all affected Network Customers in a timely manner of any scheduled Curtailment.

### **33.2 Transmission Constraints**

During any period when the Control Area Operator (pursuant to directions from the applicable Reliability Coordinator) determines that a transmission constraint exists on the Transmission System, and such constraint may impair the reliability of the Transmission Owner's system, the Control Area will take whatever actions, consistent with Good Utility Practice, that are reasonably necessary to maintain the reliability of the Transmission System. To the extent the Control Area Operator determines that the reliability of the Transmission System can be maintained by redispatching resources, it will initiate procedures pursuant to the Network Operating Agreement to redispatch all Network Resources and the Transmission Owner'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 Owner'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 Control Area Operator implements least-cost redispatch procedures in response to a transmission constraint, the Transmission Owner 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 Owner's Transmission System cannot be relieved through the implementation of least-cost redispatch procedures and the Control Area Operator determines that it is necessary to Curtail scheduled deliveries, the Parties shall Curtail such schedules in accordance with the Network Operating Agreement.

### **33.5 Allocation of Curtailments**

The Control Area Operator 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 Owner and Network Customer in proportion to their respective Load Ratio Shares. The Control Area Operator where applicable shall not direct the Network Customer to Curtail schedules to an extent greater than the Control Area operator would Curtail the Transmission Owner's schedules under similar circumstances.

### **33.6 Load Shedding**

To the extent that a system contingency exists on the Transmission Owner's Transmission System and the Control Area Operator determines that it is necessary for the Transmission Owner 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 Control Area Operator reserves the right, consistent with Good Utility Practice and on a not unduly

discriminatory basis, to Curtail Network Integration Transmission Service without liability for the purpose of making necessary adjustments to, changes in, or repairs to the Transmission Owner's 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 Owner's Transmission System or on any other system(s) directly or indirectly interconnected with the Transmission Owner's Transmission System, the Control Area Operator, 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 Control Area Operator 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 Owner's use of the Transmission System on behalf of its Native Load Customers. The Transmission Owner shall specify the rate treatment and all related terms and conditions applicable in the event that the Network Customer fails to respond to established Load Shedding and Curtailment procedures.

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

The Network Customer shall pay the Transmission Owner for any Direct Assignment Facilities, Ancillary Services, and applicable study costs, consistent with Commission policy, along with the following:

### **34.1 Charge**

The Network Customer shall pay the charges set forth in Schedule 9.

### **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 Owner under Section 31.3) coincident with the Transmission Owner's Monthly Transmission System Peak.

### **34.3 Determination of Transmission Owner's Monthly Transmission System Load**

The Transmission Owner's monthly Transmission System load is the Transmission Owner'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 Owner pursuant to Section 33. To the extent that the Transmission Owner 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 Owner 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 Nos. 888 and 888A, and any subsequent

revisions thereto. However, the Transmission Owner must separately file any proposal to recover stranded costs under Section 205 of the Federal Power Act.

#### **34.6 Incremental Cost Charge**

The Transmission Customer shall pay, either in a lump sum or on a monthly basis as agreed to by the Transmission Owner, for the incremental cost of any Direct Assignment Facilities or Network Upgrades determined in accordance with this Tariff that may be directly assigned to the Transmission Customer in accordance with Commission policies.

### **35 Operating Arrangements**

#### **35.1 Operation Under The Network Operating Agreement**

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

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

The terms and conditions under which the Network Customer shall operate its facilities and the technical and operational matters associated with the implementation of Part III of the Tariff shall be specified in the Network Operating Agreement. The Network Operating Agreement shall provide for the Parties to (i) operate and maintain equipment necessary for integrating the Network Customer within the Transmission Owner's Transmission System (including, but not limited to, remote terminal units, metering, communications equipment and relaying equipment), (ii) transfer data between the Transmission Owner and the Network Customer (including, but not limited to, heat rates and operational characteristics of Network Resources, generation schedules for units

outside the Transmission Owner'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 Parties as provided for hereunder, 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 guidelines of the ERO. The Transmission Owner shall not unreasonably refuse to accept contractual arrangements with another entity for Ancillary Services. The Network Operating Agreement is included in Attachment G.

### **35.3 Network Operating Committee**

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

## **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 by the Transmission Owner. The Transmission Customer must purchase this service from the Transmission Owner.

Service under this Schedule shall be at a single, system-wide rate. Amounts to be recovered under this Schedule 1 shall be calculated as follows:

$$(1 - 2 \pm 3) / 4$$

Where:

- 1 = The sum of all costs booked to FERC Account No. 561 (including all sub-accounts) in the most recent calendar year.
- 2 = The sum of all charges under this Schedule assessed to firm transactions of less than one year, all non-firm transactions, and any other transactions whose loads are not included in the divisor used to calculate the long-term firm and network service transmission rates in Schedules 7 and Schedule 10 as determined in accordance with Attachment O.
3. = A true up of the difference in the amounts expected to be recovered under Schedule 1 for the prior year and the amounts actually recovered under Schedule 1 for the prior year.
- 4 = The Divisor used to calculate the long-term firm and network service transmission rates in Schedules 7 and Schedule 10 as determined in accordance with Attachment O.

This rate shall be updated on an annual basis on or before May 1 of each year. The formula above produces the Annual Rate in \$/kw-year. The Monthly Rate (\$/kw-mo.) will then be calculated by dividing the Annual Rate by 12, the Weekly Rate (\$/kw-week) will be the Annual Rate divided by 52, the Daily Rate (\$/kw-day) will be the Annual Rate divided by 365 and the Hourly Rate (\$/kwh) will be the Annual Rate divided by 8760. The rates shall be posted on the Transmission Owner's OASIS.



**SCHEDULE 2**  
**REACTIVE SUPPLY AND VOLTAGE CONTROL FROM GENERATION SOURCES**  
**SERVICE**

In order to maintain transmission voltages on the Transmission Owner's transmission facilities within acceptable limits, generation facilities under the control of the control area operators are operated to produce (or absorb) reactive power. Thus, Reactive Supply and Voltage Control from Generation Sources Service must be provided for each transaction on the Transmission Owner's transmission facilities. The amount of Reactive Supply and Voltage Control from Generation 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 Owner.

All generators, affiliated or unaffiliated with the Transmission Owner, are to be compensated on a comparable basis. Specifically, all generators, affiliated or unaffiliated, meeting the qualifying requirements described in this Schedule 2, will be compensated \$5.00 per MVarh for reactive power produced outside the power factor deadband (.95 leading to .95 lagging). There will be no compensation to all generators, affiliated or unaffiliated, for reactive power produced within the power factor deadband (.95 leading to .95 lagging). The power factor is measured or determined by the integrated hourly MW and MVar values at a generator's Point of Interconnection, *i.e.*, where the generator connects to the Transmission System. A generator that produces less than 1 MVarh over the integrated hour will not receive compensation for reactive power for those hours.

**QUALIFIED GENERATOR REQUIREMENTS**

Any existing or new generator in Transmission Owner's control area will be deemed a Qualified Generator and will continue to be so qualified provided that a copy of the NERC audit or a self-certification of compliance with NERC Standard VAR-002 is received by Transmission Owner, in any year that such audit or such self-certification is required. All Qualified Generators must meet the technical requirements below.

**A. Technical:**

1. Each Qualified Generator must be interconnected to the Transmission Owner's Transmission System.
2. Each Qualified Generator must remain in compliance by NERC/SERC or continue to self-certify as (a) fully compliant; (b) level 1 non-compliant; or (c) level 2 non-compliant with NERC Standard VAR-002, when such self-certification is required.
3. Each Qualified Generator must designate the entity that is to receive dispatch instructions and the entity to receive compensation.
4. Each Qualified Generator shall maintain the capability to provide MWh, MVARh and voltage data, by such means of transmittal, at such intervals, and at such accuracy level, as may be required by NERC/SERC standards.
5. The generation resource must be able to meet a voltage schedule, to be posted on OASIS, which is based on a percentage of the nominal interconnection line voltage, with differentiation based on on-peak, off-peak, and shoulder-peak conditions. The uniform voltage schedule will be subject to exception where (a) the generation resource would be required to exceed its operational limits to produce reactive power; or (b) necessary to coordinate with neighboring control area operators in order to maintain reliability. All exceptions will be granted on a non-discriminatory basis and posted on OASIS.

**B. Re-Evaluation of Qualified Generator Status**

1. If a Qualified Generator fails to notify Transmission Owner that Qualified Generator's automatic voltage regulator is out of service three or more times in a calendar month, the

Transmission Owner shall determine whether the generation resource should continue to be a Qualified Generator based on the technical criteria established above.

2. If the Transmission Owner determines that the generator should not continue to be a Qualified Generator, the Transmission Owner shall notify the owner and stop providing reactive compensation to such generator owner.

**C. Regaining Qualified Generator status:**

If a generator has had its status as a Qualified Generator removed by the Transmission Owner, such generator may be reinstated to receive reactive compensation two (2) billing months after disqualification. If the owner of the generator desires to be reinstated, it must make application for such reinstatement to the Transmission Owner and demonstrate that the cause(s) for the disqualification has been remedied. The Transmission Owner shall waive the two month period and immediately reinstate the Qualified Generator status if it determines that such status was erroneously removed.

**TRANSMISSION CUSTOMER CHARGES**

Reactive Supply and Voltage Control from Generation Sources is to be provided directly by the Transmission Owner or indirectly by the Transmission Owner making arrangements with the Control Area Operator that performs this service for the Transmission Owner's Transmission System. The Transmission Customer must purchase this service from the Transmission Owner. The Transmission Customer may reduce the total charges for this service to the extent it can contribute to the required reactive supply of the system. The Company will provide this service at the rate specified in Schedule 2 times the Transmission Customer's Reserved Capacity or the Transmission Customer's Network Load for Network Integration Transmission Service. The

rate for this service shall not exceed the applicable rate per kilowatt-month specified below times the Transmission Customer's highest monthly Network Load or Reserved Capacity:

<b>Service Type</b>	<b>Point-to-Point ON-PEAK-OFF- PEAK Firm: Up To</b>	<b>ON-PEAK-OFF- PEAK Non-Firm: Up To</b>	<b>Network: Up To</b>
	Applied to Reservation Amount	Applied to Reservation Amount	Applied to Network Load
Annual (\$/KW-Yr)	\$1.30		
Monthly (\$/KW-Mo)	\$0.108	\$0.108	\$0.108
Weekly (\$/KW-Wk)	\$0.025	\$0.025	
Daily (\$/KW-Day)	\$0.005/0.0036	\$ 0.005/0.0036	
Hourly (\$/KWH)		\$ 0.0003/0.00016	

Note: OFF-Peak Hours are defined as all hours on OFF-PEAK DAYS and the hour ending 2400 through the hour ending 0700 prevailing Eastern time on other days. Off-Peak days shall be defined as Saturday and Sunday, as well as the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Note: Daily delivery

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 for this service in any day during such week.

Note: Hourly delivery

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 of this service, shall not exceed the weekly rate specified above times the highest amount in Kilowatts of Reserved Capacity for this service in any hour during such week.

The Transmission Owner will provide a true-up filing annually showing the actual compensation paid to generators for reactive power outside the bandwidth and provide a refund of any excess revenues collected to all transmission customers taking service under the Transmission Owner's OATT on a load ratio share basis for Network Integration Transmission Service and on a reservation basis for Point-to-Point Transmission Service.

**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 Control Area. The Transmission Owner 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 Owner or make alternative comparable arrangements to satisfy its Regulation and Frequency Response Service obligation. The amount of and charges for Regulation and Frequency Response Service provided by the Transmission Owner are set forth below.

A Transmission Customer purchasing Regulation and Frequency Response Service will be required to purchase an amount of reserved capacity equal to 1 percent of the Transmission Customer's Reserved Capacity for Point-to-Point Transmission Service or 1 percent of the Transmission Customer's Network Load for Network Integration Transmission Service. The billing determinants for this service shall be reduced by any portion of the 1 percent purchase obligation that Transmission Customer obtains from third parties or supplies itself.

The rate for this service shall not exceed the applicable rate per kilowatt-month specified below times the Transmission Customer's highest monthly Network Load or Reserved Capacity:

<b>Service Type</b>	<b>Point-to-Point ON-PEAK-OFF- PEAK Firm: Up To</b>	<b>ON-PEAK-OFF- PEAK Non-Firm: Up To</b>	<b>Network: Up To</b>
	Applied to 1% of the Reservation	Applied to 1% of the Reservation	Applied to 1% of the Network Load
Annual (\$/KW-Yr)	\$ 82.80		
Monthly (\$/KW-Mo)	\$ 6.90	\$ 6.90	\$ 6.90
Weekly (\$/KW-Wk)	\$ 1.59	\$ 1.59	
Daily (\$/KW-Day)	\$0.318/.227	\$0.318/.227	
Hourly (\$/KWH)		\$ 0.0199/0.0095	

Note: OFF-Peak hours are defined as all hours on OFF-PEAK DAYS and the hour ending 2400 through the hour ending 0700 prevailing Eastern time on other days. Off-Peak days shall be defined as Saturday and Sunday, as well as the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Note: Daily delivery

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 for this service in any day during such week.

Note: Hourly delivery

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 of this service, shall not exceed the weekly rate specified above times the highest amount in Kilowatts of Reserved Capacity for this service in any hour during such week.

**SCHEDULE 4**  
**ENERGY IMBALANCE SERVICE**

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 Owner 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 Owner 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 Owner, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Owner by that Control Area operator. The Transmission Owner may charge a Transmission Customer a penalty for either hourly energy imbalances under this Schedule or a penalty for hourly generator imbalances under Schedule 9 for imbalances occurring during the same hour, but not both unless the imbalances aggravate rather than offset each other.

The Transmission Owner shall establish charges for energy imbalance based on the deviation bands as follows: (i) Tier 1 deviations within +/- 1.5 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) will be netted on a monthly basis and settled financially, at the end of the month, at 100 percent of incremental or decremental cost; (ii) Tier 2 applies to the portion of the deviation 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 energy 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 incremental



cost or 90 percent of decremental cost, and (iii) Tier 3 applies to the portion of the deviation greater than +/- 7.5 percent (or 10 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) will be settled financially, at the end of each month, at 125 percent of incremental cost or 75 percent of decremental cost.

For purposes of this Schedule, incremental cost and decremental cost represent the Transmission Owner's actual average hourly cost of the last 10 MW (*i.e.*, the highest cost 10 MW) dispatched for any purpose, *e.g.*, to supply the Transmission Owner's Native Load Customers, correct imbalances, or make off-system sales, and will include the replacement cost of fuel, unit heat rates, incremental operation and maintenance costs, purchased and interchange power costs and taxes, and start up costs (including any commitment and redispatch costs), as applicable.

For Tier 1 deviations, the Transmission Owner will keep an account of all deviations by the customers in that month, and then calculate each month the net energy imbalance in MWh, positive or negative, for each transmission customer, based on the customer's Tier 1 deviations for that month. The charge for net Tier 1 deviations shall be based on 100% of the load weighted hourly average incremental/decremental costs. The transmission customer's charge will be determined by multiplying the net MWh quantity of the net Tier 1 deviations by the load weighted hourly average incremental/decremental rate.

For Tier 2 and Tier 3 deviations, a charge will be made in accordance with this Schedule for each hour in which an imbalance occurred. These charges will be based on a percentage of the actual incremental or decremental cost for that hour, as specified above.

In order to determine the last 10 MW dispatched for any purpose, the Transmission Owner will rely upon information supplied through the After the Fact Billing (“AFB”) Process, a stacking program which determines the cost allocations from generating unit sources to load sinks (based on dispatch), and will identify the top 10 highest cost MWs of energy dispatched for any purpose. The AFB process will be used to identify the following components of the incremental cost:

- Fuel Cost - This value is obtained from Fuel Supply and represents the replacement costs of fuel. For dispatching the system, the fuel cost represents the replacement cost of fuel as reported by Fuel Supply. For the AFB process, the fuel cost represents the actual inventory cost based on the reported purchases in the coal purchase report from the previous month.<sup>1</sup> The SO<sub>2</sub> emissions adder included in the AFB process is a function of the SO<sub>2</sub> content of the coal, the removal efficiency of the unit, and the market price for an SO<sub>2</sub> allowance.<sup>2</sup> The NO<sub>x</sub> emissions adder is a function of the NO<sub>x</sub> emission rate of the unit and the market price for a NO<sub>x</sub> allowance.<sup>3</sup> These components are incremental costs of providing fuel for the imbalance service, as they specify the cost of replacement fuel in that E.ON U.S. must purchase such allowances to account for the use of this fuel for imbalance purposes.

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<sup>1</sup> For example, coal purchases for March as reported in April will be used for the May fuel cost in AFB.

<sup>2</sup> The SO<sub>2</sub> adder is calculated as follows:  $EA = (\text{lbs SO}_2/\text{Mbtu}) \times (1 - \text{Removal Efficiency}) \times (\text{Allowance Price } \$/\text{ton}) / 2000$ . The removal efficiencies are updated annually based on historical performance. The SO<sub>2</sub> content is obtained from coal supply and is based upon the coal purchases from the previous month (May data is based upon March coal purchases). The allowance price is obtained from Environmental Affairs and is based on the allowance price from Cantor-Fitzgerald.

<sup>3</sup> The NO<sub>x</sub> adder is calculated as follows:  $EA = (\text{NO}_x \text{ Emission Rate}) \times (\text{Allowance Price } \$/\text{ton}) / 2000$ . The emission rates updated annually based on historical performance. The allowance price is obtained from Environmental Affairs and is based on the allowance price from Cantor-Fitzgerald.

- Variable O&M - Variable O&M represents the incremental maintenance and operation costs of providing the imbalance service. Once the stacking portion of the AFB process is completed, the O&M is added based on the units in the stack. Variable O&M for the E.ON U.S. coal units it is based upon the cost of the annual maintenance and the overhaul maintenance, divided by the MWH generated between the outages. The scrubber consumable cost is based upon the variable operating expenses (limestone, carbide lime, barge unloading, etc.) associated with scrubbing the unit.
- Unit Commitment Cost - For the Base Load generating units, the cost of startup and minimum load is not included in the AFB process. Those costs are assumed to be collected from Native Load Customers since the units are on-line to meet the requirements of Native Load. For the Combustion Turbines generating units, the heat rate curves used in AFB are adjusted to account for the costs associated with the full dispatch of the unit. Therefore, commitment costs are approximated for these units in AFB.
- Redispatch Costs – The AFB system is run after actual generation dispatch occurs. To the extent that generating units were re-dispatched, the costs associated with the units actually dispatched are embedded in the AFB process.

**SCHEDULE 5**  
**OPERATING RESERVE - SPINNING RESERVE SERVICE**

Spinning Reserve Service is needed to serve load immediately in the event of a system contingency. Spinning Reserve Service may be provided by generating units that are on-line and loaded at less than maximum output and by non-generation resources capable of providing this service. The Transmission Owner 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 Owner 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. The Rate for this service shall not exceed the applicable rate per kilowatt month specified below times the Transmission Customer's highest monthly Network Load or Reserved Capacity.

A Transmission Customer purchasing Spinning Reserve Service will be required to purchase an amount of reserved capacity equal to 1.5 percent of the Transmission Customer's Reserved Capacity for Point-to-Point Transmission Service or 1.5 percent of the Transmission Customer's Network Load for Network Integration Transmission Service. The billing determinants for this service shall be reduced by any portion of the 1.5 percent purchase obligation that a Transmission Customer obtains from third parties or supplies itself. No energy imbalance charge will be imposed as a result of a customer's use of Spinning Reserve and Supplemental Reserve Services.

<b>Service Type</b>	<b>Point-to-Point ON-PEAK-OFF- PEAK Firm: Up To</b>	<b>ON-PEAK-OFF- PEAK Non-Firm: Up To</b>	<b>Network: Up To</b>
	Applied to 1.5% of the Reservation	Applied to 1.5% of the Reservation	Applied to 1.5% of the Network Load
Annual (\$/KW-Yr)	\$ 85.56		

Monthly (\$/KW-Mo)	\$ 7.13	\$ 7.13	\$ 7.13
Weekly (\$/KW-Wk)	\$ 1.65	\$ 1.65	
Daily (\$/KW-Day)	\$0.329/.234	\$0.329/.234	
Hourly (\$/KWH)		\$ 0.0206/0.0098	

Note: OFF-Peak hours are defined as all hours on OFF-PEAK DAYS and the hour ending 2400 through the hour ending 0700 prevailing Eastern time on other days. Off-Peak days shall be defined as Saturday and Sunday, as well as the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Note: Daily delivery

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 for this service in any day during such week.

Note: Hourly delivery

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 of this service, shall not exceed the weekly rate specified above times the highest amount in Kilowatts of Reserved Capacity of this service in any hour during such week.

**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 Owner 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 Owner 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.

A Transmission Customer purchasing Supplemental Reserve Service will be required to purchase an amount of reserved capacity equal to 1.5 percent of the Transmission Customer's Reserved Capacity for Point-to-Point Transmission Service or 1.5 percent of the Transmission Customer's Network Load for Network Integration Transmission Service. The billing determinants for this service shall be reduced by any portion of the 1.5 percent purchase obligation that a Transmission Customer obtains from third parties or supplies itself. No Energy imbalance charge will be imposed as a result of a customer's use of Spinning Reserve and Supplemental Reserve Services.

The Rate for this service shall not exceed the applicable rate per kilowatt specified below times the Transmission Customer's highest monthly Network Load or Reserved Capacity:

<b>Service Type</b>	<b>Point-to-Point ON-PEAK-OFF- PEAK Firm: Up To</b>	<b>ON-PEAK-OFF- PEAK Non-Firm: Up To</b>	<b>Network: Up To</b>
	Applied to 1.5% of the	Applied to 1.5% of the	Applied to 1.5% of the

	Reservation	Reservation	Network Load
Annual (\$/KW-Yr)	\$ 85.56		
Monthly (\$/KW-Mo)	\$ 7.13	\$ 7.13	\$ 7.13
Weekly (\$/KW-Wk)	\$ 1.65	\$ 1.65	
Daily (\$/KW-Day)	\$0.329/.234	\$0.329/.234	
Hourly (\$/KWH)		\$ 0.0206/0.0098	

Note: OFF-Peak hours are defined as all hours on OFF-PEAK DAYS and the hour ending 2400 through the hour ending 0700 prevailing Eastern time on other days. Off-Peak days shall be defined as Saturday and Sunday, as well as the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Note: Daily delivery

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 for this service in any day during such week.

Note: Hourly delivery

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 of this service, shall not exceed the weekly rate specified above times the highest amount in Kilowatts or Reserved Capacity for this service 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 Owner each month for Reserved Capacity at the sum of the applicable charges set forth below in addition to other applicable charges specified in the Tariff.

**(1) Rates:** All effective rates under this Schedule shall be posted on the Transmission Owner's OASIS. The rates are calculated using the formula included in Attachment O. The rates will be recalculated each June 1 based on the prior full calendar or fiscal year.

**(2) Caps:** The total demand charge in any week, pursuant to a reservation for daily delivery, shall not exceed the weekly rate times the highest amount in kilowatts of Reserved Capacity in any day during such week.

**(3) Discounts:** Three principal requirements apply to discounts for transmission service as follows: (1) any offer of a discount made by the Transmission Owner 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 Owner 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.



**(4) Compliance with Agreements:** If the Commission has allowed agreements to become effective which require a waiver of any of the charges under this Schedule, then such charges shall be waived.

**(5) Credit for Charges During Transmission Loading Relief (TLR) Events:** In the event there is a Curtailment of confirmed Point-To-Point Transmission Service on the Transmission System due to a TLR event, credit will be given to the Transmission Customer(s) that are actually requested to curtail their energy schedules associated with the confirmed Point-To-Point Transmission Service. No credits will be given for: (1) TLR events external to the Transmission System; (2) Non-Firm Secondary Point-To-Point Transmission Service under a Firm Point-To-Point reservation; or, (3) Next-Hour Transmission Service. Under no circumstances shall the amount credited exceed the amount the customer was actually curtailed nor will credit be given for any hours other than those in which the Curtailment was requested.

**(6) Expansion and Losses:** Firm service transactions which are initiated after the effective date of this OATT shall be charged the costs of expansion (where applicable) and losses in accordance with Schedule 10.

**(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.

**SCHEDULE 8**  
**NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE**

The Transmission Customer shall compensate the Transmission Owner for Non-Firm Point-To-Point Transmission Service up to the sum of the applicable charges set forth below in addition to other applicable charges specified in the Tariff.

**(1) Rates:** All effective rates under this Schedule shall be posted on the Transmission Owner's OASIS. The rates are calculated using the formula included in Attachment O, pages \_ and \_ except as provided in this Schedule 8. The rates will be recalculated each June 1 based on the prior calendar or fiscal year.

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

**(3) Discounts:** Three principal requirements apply to discounts for transmission service as follows: (1) any offer of a discount made by the Transmission Owner 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 Owner 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.

**(4) Compliance With Agreements:** If the Commission has allowed agreements to become effective which require a waiver of any of the charges under this Schedule, then such charges shall be waived.

**(5) Credit for Charges During Transmission Loading Relief (TLR) Events:** In the event that the Transmission Owner initiates Curtailment of confirmed Point-To-Point Transmission Service on the Transmission System due to a TLR event, credit will be given to the Transmission Customer(s) that are actually requested to curtail their energy schedules associated with the confirmed Point-To-Point Transmission Service. No credits will be given for: (1) TLR events external to the Transmission System; (2) Non-Firm Secondary Point-To-Point Transmission Service under a Firm Point-To-Point reservation; or, (3) Next-Hour Transmission Service.

Under no circumstances shall the amount credited exceed the amount the customer was actually curtailed nor will credit be given for any hours other than those in which the Curtailment was requested.

**(6) Expansion and Losses:** Non-Firm service transactions which are initiated after the effective date of this OATT shall be charged losses in accordance with Schedule 10.

**(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.

**SCHEDULE 9**  
**GENERATOR IMBALANCE SERVICE**

Generator Imbalance Service is provided when a difference occurs between the output of a generator located in the Transmission Owner'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. The Transmission Owner must offer this service, to the extent it is physically feasible to do so from its own resources or from resources available to do 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 Owner 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 Transmission Owner performs this service for itself, charges to the Transmission Customer are to reflect only a pass-through of the costs charged by the Transmission Owner. The Transmission Owner 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.

The Transmission Owner shall establish charges for generator imbalance based on the deviation bands as follows: (i) Tier 1 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 the month, at 100 percent of incremental or decremental cost; (ii) Tier 2 applies to the portion of the deviation 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 incremental cost or 90 percent of decremental cost, and (iii) Tier 3 applies to the portion of the deviation 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 financially, at the end of each month, at 125 percent of incremental cost or 75 percent of decremental cost, 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 Owner, 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.

For purposes of this Schedule, incremental cost and decremental cost represent the Transmission Owner's actual average hourly cost of the last 10 MW (*i.e.*, the highest cost 10 MW) dispatched for any purpose, *e.g.*, to supply the Transmission Owner's Native Load Customers, correct imbalances, or make off-system sales and will include the replacement cost of fuel, unit heat rates, incremental operation and maintenance costs, purchased and interchange

power costs and taxes, and start up costs (including any commitment and redispatch costs), as applicable.

For Tier 1 deviations, the Transmission Owner will keep an account of all deviations by the customers in that month, and then calculate each month the net generator imbalance in MWh, positive or negative, for each transmission customer, based on the customer's Tier 1 deviations for that month. The charge for net Tier 1 deviations shall be based on 100% of the load weighted hourly average incremental/decremental costs. The transmission customer's charge will be determined by multiplying the net MWh quantity of the net Tier 1 deviations by the load weighted hourly average incremental/decremental rate.

For Tier 2 and Tier 3 deviations, a charge will be made in accordance with this Schedule for each hour in which an imbalance occurred. These charges will be based on a percentage of the actual incremental or decremental cost for that hour, as specified above.

In order to determine the last 10 MW dispatched for any purpose, the Transmission Owner will rely upon information supplied through the After the Fact Billing ("AFB") Process, a stacking program which determines the cost allocations from generating unit sources, to load sinks (based on dispatch), and will identify the top 10 highest cost MWs of energy dispatched for any purpose.

The AFB process will be used to identify the following components of the incremental cost:

- Fuel Cost - This value is obtained from Fuel Supply and represents the replacement costs of fuel. For dispatching the system, the fuel cost represents the replacement cost of fuel as reported by Fuel Supply. For the AFB process, the fuel cost represents the actual inventory cost based on the reported purchases in the coal purchase report

from the previous month.<sup>4</sup> The SO<sub>2</sub> emissions adder included in the AFB process is a function of the SO<sub>2</sub> content of the coal, the removal efficiency of the unit, and the market price for an SO<sub>2</sub> allowance.<sup>5</sup> The NO<sub>x</sub> emissions adder is a function of the NO<sub>x</sub> emission rate of the unit and the market price for a NO<sub>x</sub> allowance.<sup>6</sup> These components are incremental costs of providing fuel for the imbalance service, as they specify the cost of replacement fuel in that E.ON U.S. must purchase such allowances to account for the use of this fuel for imbalance purposes.

- Variable O&M - Variable O&M represents the incremental maintenance and operation costs of providing the imbalance service. Once the stacking portion of the AFB process is completed, the O&M is added based on the units in the stack. Variable O&M for the E.ON U.S. coal units it is based upon the cost of the annual maintenance and the overhaul maintenance, divided by the MWH generated between the outages. The scrubber consumable cost is based upon the variable operating expenses (limestone, carbide lime, barge unloading, etc.) associated with scrubbing the unit.
- Unit Commitment Cost - For the Base Load generating units, the cost of startup and minimum load is not included in the AFB process. Those costs are assumed to be collected from Native Load Customers since the units are on-line to meet the

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<sup>4</sup> For example, coal purchases for March as reported in April will be used for the May fuel cost in AFB.

<sup>5</sup> The SO<sub>2</sub> adder is calculated as follows:  $EA = (\text{lbs SO}_2/\text{Mbtu}) \times (1 - \text{Removal Efficiency}) \times (\text{Allowance Price } \$/\text{ton}) / 2000$ . The removal efficiencies are updated annually based on historical performance. The SO<sub>2</sub> content is obtained from coal supply and is based upon the coal purchases from the previous month (May data is based upon March coal purchases). The allowance price is obtained from Environmental Affairs and is based on the allowance price from Cantor-Fitzgerald.

<sup>6</sup> The NO<sub>x</sub> adder is calculated as follows:  $EA = (\text{NO}_x \text{ Emission Rate}) \times (\text{Allowance Price } \$/\text{ton}) / 2000$ . The emission rates updated annually based on historical performance. The allowance price is obtained from Environmental Affairs and is based on the allowance price from Cantor-Fitzgerald.

requirements of Native Load. For the Combustion Turbines generating units, the heat rate curves used in AFB are adjusted to account for the costs associated with the full dispatch of the unit. Therefore, commitment costs are approximated for these units in AFB.

- Redispatch Costs – The AFB system is run after actual generation dispatch occurs. To the extent that generating units were re-dispatched, the costs associated with the units actually dispatched are embedded in the AFB process.



**SCHEDULE 10**  
**NETWORK INTEGRATION TRANSMISSION SERVICE**

The Transmission Customer shall compensate the Transmission Owner for Network Integration Transmission Service at the applicable charges set forth below in addition to other applicable charges specified in the Tariff. The monthly rates are calculated using the formulas included in Attachment O. The initial rates will be calculated based on a prior full calendar or fiscal year period. However, if the initial rates are to take effect between January 1 and June 1 of a year, then the calendar or fiscal year used in determining the rates shall be the calendar year preceding the last calendar or fiscal year. These initial rates then would be recalculated effective on June 1 based on the prior full calendar or fiscal year.

**Network Service Between MISO/PJM and LG&E:** Arrangements for this service should be made between MISO/PJM and the Transmission Owner.

**SCHEDULE 11**  
**LOSS COMPENSATION SERVICE**

Capacity and energy losses occur when a Transmission Owner delivers electricity across its transmission facilities for a Transmission Customer. A Transmission Customer may elect to

(1) supply the capacity and/or energy necessary to compensate the Transmission Owner for such losses, (2) receive an amount of electricity at delivery points that is reduced by the amount of losses incurred by the Transmission Owner, or (3) with the concurrence of the Transmission Owner, have the Transmission Owner supply the capacity and/or energy necessary to condensate for such losses.

The loss factor used to determine the amount of losses associated with the use of facilities other than distribution facilities shall be three (3) percent. The Transmission Owner will determine such losses by dividing the sum of hourly energy scheduled to be delivered to the Transmission Customer's Points of Delivery by 0.97 less the amount scheduled to be delivered. Determination of losses to be supplied by the Transmission Customer by coincident schedules will be done on a daily basis for each schedule. However, in no event shall such determination result in the Transmission Owner being under compensated after any hour. If the Transmission Owner and Transmission Customer agree to have the Transmission Owner compensate for losses under option 3 above, the Transmission Customer shall be charged for Loss Compensation Service at a rate not to exceed 100 percent of the Transmission Owner's incremental cost to produce energy after serving all other obligations (including economy and opportunity transactions) and a Generation Capacity Loss Adder of \$.006 per kWh.

**SCHEDULE 12**  
**DISTRIBUTION OF PENALTY REVENUES**

The Transmission Owner shall distribute penalty revenues collected pursuant to Schedules 4 and 9, transmission study penalties collected pursuant to Sections 19.10 and 32.5, or unreserved use penalties pursuant to Schedule 13 of the OATT in the following manner.

1. Imbalance penalty revenues collected by the Transmission Owner pursuant to Schedules 4 and 9 will be distributed among all non-offending Network and Transmission Customers (including the Transmission Owner, if it has used transmission or NITS during the month and has not incurred a payment under Schedule 4 or 9 during a given hour). The amount of imbalance penalty revenue collected for a particular month shall be allocated on a pro-rata basis, based on the non-offending Network Customers' monthly demand and the non-offending Transmission Customers' monthly peak demand. For the purposes of this paragraph 1, a "non-offending Network or Transmission Customer" is one to whom the penalty component did not apply in the hour, or who was out of balance, but within the first tier. Additionally, the Transmission Owner is not required to distribute penalty revenues until after it recovers all costs (including any associated transmission costs) incurred in providing imbalance service. For the purposes of this paragraph 1, "imbalance penalty revenues" refers to amounts collected by the Transmission Owner under Schedules 4 or 9 in excess of the incremental cost.

2. Transmission study penalties incurred by the Transmission Owner pursuant to Sections and 32.5 of the OATT will be distributed among all non-Affiliated Network and Transmission Customers. The transmission study penalties will be assessed quarterly. Credits equal to the total penalty amount for a quarter shall be allocated on a pro-rata basis, based on the Network Customers' monthly demand and the Transmission Customers' monthly peak demand. For monthly billing purposes, the total amount of to be credited to each customer will be the

quarterly amount be divided by three. Each Network and Transmission Customer will be credited this amount on its bills for the next three months (*i.e.* the quarter following the quarter in which the penalty accrued).

3. Unreserved use penalty revenues collected by the Transmission Owner pursuant to Schedule 13 will be distributed among all non-offending Network and Transmission Customers (including the Transmission Owner, if it has used transmission or NITS during the month and has not incurred a penalty under Schedule 13). The amount of unreserved use penalty revenue collected for a particular month shall be allocated on a pro-rata basis, based on the non-offending Network Customers' monthly demand and the non-offending Transmission Customers' monthly peak demand. For the purposes of this paragraph 3, a "non-offending Network or Transmission Customer" is one who has not incurred a penalty under Schedule 13 for the month. For the purposes of this paragraph 3, "unreserved use penalty revenues" refers to amounts collected under Schedule 13 above the base firm Point-to-Point transmission service charge for the transmission service provided.

**SCHEDULE 13**  
**UNRESERVED USE PENALTY**

In the event that a Transmission or Network Customer's use of the Transmission System during any hour of the day exceeds the amount of the Transmission or Network Customer's Reserved Capacity, the Transmission Owner shall charge and the Transmission or Network Customer shall pay a penalty charge of 200% of the applicable rate for Firm Point-to-Point Service in accordance with this Schedule 13.

§ If the unreserved use occurs within a single day, the penalty charge shall be based on the daily rate for Firm Point-to-Point Service.

§ If an unreserved use penalty is incurred on more than one day within a calendar week, the penalty charge shall be based on the weekly rate for Firm Point-to-Point Service.

§ If unreserved use penalties are incurred during more than one calendar week during the calendar month, the penalty charge shall be based on the monthly rate for Firm Point-to-Point Service.

The unreserved use penalty revenues collected under this Schedule 13 shall be distributed to all non-offending customers in accordance with the terms of Schedule 12.

**ATTACHMENT A**  
**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 Louisville Gas & Electric Kentucky Utilities (LG&E/KU or “Transmission Owner”) and \_\_\_\_\_ (“Transmission Customer”).
- 2.0 The Transmission Customer has been determined by Transmission Owner to have a Completed Application for Firm Point-To-Point Transmission Service under the Tariff.
- 3.0 The Transmission Customer has provided to Transmission Owner 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) the requested service commencement date, 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 such date as mutually agreed upon by the parties.
- 5.0 LG&E/KU 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.

Transmission Owner:

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Transmission Customer:

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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 Customer

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

Transmission Owner

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

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

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

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

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

2.0 Description of capacity and energy to be transmitted by Transmission Owner 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:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_



**ATTACHMENT A-1**  
**FORM OF SERVICE AGREEMENT FOR**  
**THE RESALE, REASSIGNMENT OR TRANSFER OF**  
**POINT-TO-POINT TRANSMISSION SERVICE**

- 1.0 This Service Agreement, dated as of dated as of \_\_\_\_\_, is entered into, by and between Louisville Gas & Electric Kentucky Utilities (LG&E/KU or “Transmission Owner”) and \_\_\_\_\_ (the Assignee).
- 2.0 The Assignee has been determined by Transmission Owner 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 Owner’s Tariff, except for those terms and conditions negotiated by the Reseller of the reassigned transfer capability (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 Owner shall credit the Reseller for the price reflected in the Assignee’s Service Agreement or the associated OASIS schedule.
- 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.

Transmission Owner:

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

Transmission Customer:

\_\_\_\_\_

- 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): \_\_\_\_\_  
\_\_\_\_\_



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

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

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

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

2.0 Description of capacity and energy to be transmitted by Transmission Owner 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:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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 transfer capability:  
\_\_\_\_\_

**ATTACHMENT B**  
**FORM OF SERVICE AGREEMENT FOR NON-FIRM POINT-TO-POINT**  
**TRANSMISSION SERVICE**

- 1.0 This Service Agreement, dated as of \_\_\_\_\_ is entered into, by and between Louisville Gas & Electric/Kentucky Utilities (LG&E/KU or “Transmission Owner”) and \_\_\_\_\_ (“Transmission Customer”).
- 2.0 The Transmission Customer has been determined by Transmission Owner to be a Transmission Customer under Part II of the Tariff and has filed a Completed Application for Non-Firm Point-To-Point Transmission Service in accordance with Section 18.2 of the Tariff.
- 3.0 Service under this Agreement shall be provided by Transmission Owner upon request by an authorized representative of the Transmission Customer.
- 4.0 The Transmission Customer agrees to supply information Transmission Owner deems reasonably necessary in accordance with Good Utility Practice in order for it to provide the requested service.
- 5.0 LG&E/KU agree to provide and the Transmission Customer agrees to take and pay for Non-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.

Transmission Owner:

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Transmission Customer:

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- 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 Customer

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

Transmission Owner

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

## **ATTACHMENT C** **METHODOLOGY TO ASSESS AVAILABLE TRANSFER CAPABILITY**

This Attachment C sets forth the methodology to assess Total Transfer Capability (“TTC”) and Available Transfer Capability (“ATC”) through coordination between the Transmission Owner and the Reliability Coordinator or “RC.” This Attachment C is intended to supplement any definition of the relationship between the Transmission Owner and the RC as provided in the OATT. The Transmission Owner and the RC shall utilize the method described in this Attachment C to calculate ATC.

The ATC is calculated using a flow-based approach, described below that considers Available Flowgate Capacity (“AFC”). This methodology will be applied in compliance with the Joint Reliability Coordinator Agreement (“JRCA”) and its related Congestion Management Process (“CMP”) among TVA, the Midwest ISO and PJM Interconnection, LLC, which is included in this Tariff at Attachment Q.

### **1) Operating, Planning and Study Horizons for ATC:**

#### **a. Firm ATC:**

For Firm ATC calculations, the Transmission Owner defines the following periods:

**Planning Horizon:** The period beginning at the end of the next day 00:00 a.m. and ending at the end of the 34<sup>th</sup> calendar day following the current day.

**Study Horizon:** The period beginning at the start of the upcoming calendar month and ending at the end of the 18<sup>th</sup> calendar month following the current month.

#### **b. Non-Firm ATC:**

For Non-Firm ATC calculations, the Transmission Owner defines the following periods:

**Operating Horizon:** The period beginning at the start of the current clock hour and ending at midnight (EST) of the following day.

**Planning Horizon:** The period beginning at the end of the next day 00:00 a.m. and ending at the end of the 34<sup>th</sup> calendar day following the current day.

**Study Horizon:** The period beginning at the start of the upcoming calendar month and ending at the end of the 18<sup>th</sup> calendar month following the current month.

### **2) Calculation Methodology: a. Firm ATC:**

The Transmission Owner calculates Firm ATC over the Planning and Study Horizons using the algorithm illustrated below in Section 3.

***Firm Daily*** ATC values are calculated every hour for the 34 calendar days following the current day.

***Firm Monthly*** ATC values are calculated hourly for the 18 calendar months following the current month.

The ATC process calculates the Transfer Distribution Factor (“TDF”) relating each flowgate to every Transmission path on the Transmission System. Each calculated TDF describes the relationship between the expected increased power flow on a specific flowgate and the corresponding transaction scheduled along a specific path.

The Firm ATC values for each transmission path are derived from the applicable TDF and  $AFC_{init}$  for the most limiting flowgate for the path.

**b. Non-Firm ATC:**

The Transmission Owner calculates Non-Firm ATC over the Operating, Planning and Study Horizons using the algorithms illustrated below in Section 3.

Non-Firm ATC is calculated in hourly, daily, and monthly increments.

***Hourly Non-Firm*** ATC values are calculated each hour for 169 hours. The Hourly values span the period beginning with the current clock hour and extending through the next 7 days. At Noon each day the calculation of the Hourly values for the next day changes to include unscheduled Firm capacity.

***Non-Firm Daily*** ATC values are calculated every hour for the 34 calendar days following the current day.

***Non-Firm Monthly*** ATC values are calculated hourly for the 18 calendar months following the current month.

Each hour, the ATC process calculates the TDF relating each flowgate to every Transmission path on the Transmission System. Each calculated TDF describes the relationship between the increased power flow on a specific flowgate and the corresponding transaction scheduled along a specific path.

The Non-Firm ATC values for each transmission path are derived from the applicable TDF and  $AFC_{init}$  for the most limiting flowgate for the path.

**3) Link to Mathematical Algorithms Used to Calculate Firm and Non-Firm ATC and Mathematical Algorithms:**

**a. Link to Algorithms:**



The Transmission Owner uses the mathematical algorithms stated below to calculate firm and non-firm ATC for the Scheduling Horizon, the Operating Horizon, and the Planning Horizon, which are available at <http://www.oatiaoasis.com/LGEE/index.html>

**b. Actual Algorithms:**

**1. Firm ATC:**

$$ATC_{\text{Firm}} = \frac{AFC_{\text{Limit}} - (CBM_L + TRM_L) - PRI}{TDF_L}$$

$ATC_{\text{Firm}}$  = The available firm transfer capability on a specified transmission path.

$AFC_{\text{Limit}}$  = The available flowgate transfer capacity on the most limiting flowgate for the specified path.

$CBM_L$  = Capacity Benefit Margin for the most limiting flowgate.

$TRM_L$  = Transmission Reliability Margin for the most limiting flowgate.

$TDF_L$  = The Transfer Distribution Factor for the specified path on the most limiting flowgate.

$PRI$  = The Power flow impact of the Transmission Service Reservations received.

**2. Non-Firm ATC:**

$$ATC_{\text{Non-Firm}} = \frac{AFC_{\text{Limit}} - PRI}{TDF_L}$$

$ATC_{\text{Non-Firm}}$  = The available firm transfer capability on a specified transmission path.

$AFC_{\text{Limit}}$  = The available flowgate transfer capacity on the most limiting flowgate for the specified path.

$TDF_L$  = The Transfer Distribution Factor for the specified path on the most limiting flowgate.

$PRI$  = The Power flow impact of the Transmission Service Reservations received.

Each day at Noon, the Non-Firm Hourly ATC calculation for the next day is modified so that unscheduled Firm capacity is available to transmission customers as Non-Firm service. The modification to the algorithm is achieved by replacing the impact of the Reservations with the

impact of the Transmission Schedules. The algorithm for calculating the Non-Firm Hourly ATC values including the unscheduled Firm capacity is illustrated below:

$$ATC_{\text{Non-Firm}} = \frac{AFC_{\text{Limit}} - SRI}{TDF_L}$$

$ATC_{\text{Non-Firm}}$  = The available firm transfer capability on a specified transmission path.

$AFC_{\text{Limit}}$  = The available flowgate transfer capacity on the most limiting flowgate for the specified path.

$TDF_L$  = The Transfer Distribution Factor for the specified path on the most limiting flowgate.

$SRI$  = The Power flow impact of the Transmission Service Schedules received.

#### 4) Procedures for Calculating ATC:

To determine the ATC on the Transmission System, the following procedures will be used:

§ **Values for Transmission Reliability Margin (“TRM”) and Capacity Benefit Margin (“CBM”) Provided to the RC:** The Transmission Owner shall provide the Reliability Coordinator with values for TRM and CBM, which will be derived under the process described in detail below.

§ **RC uses SERC OASIS to derive models for Horizons:** The Reliability Coordinator shall use SERC OASIS cases, to which the Transmission Owner has provided input, to derive hourly, daily and monthly models for the Operating, Planning and Study Horizons respectively. These models will be modified to reflect the firm and nonfirm transmission service already reserved by transmission customers. After 12:00 p.m. EDT, the current-day and next-day models will reflect Non-Firm reservations and Firm schedules (not Firm Reservations) to permit the sale of unscheduled Firm service on a Non-Firm basis.

§ **The RC will use software to determine AFC limitations:** The Reliability Coordinator will then use PTI MUST software to determine the capability of the interconnected network to accommodate a request for transmission service through the use of a flow based approach. This flow based approach determines the ATC of constrained facilities or AFC.

§ **To accurately model the effects of the Transmission Owner’s neighboring transmission systems, the Reliability Coordinator will incorporate operational data**

provided by adjacent Reliability Coordinators through the Interchange Distribution Calculator (“IDC”) System Data Exchange (“SDX”).

***The process for adding or eliminating flowgates:***

**(1) Transmission Owner Adding or Eliminating Flowgates**

- § The Transmission Owner performs transfer and single contingency analysis on the four quarterly models used in the ATC process. Flowgates that monitor the Transmission Owner’s facilities which exceed a Power Transfer Distribution Factor of 4% and an Outage Transfer Distribution Factor of 2% are tested for limitations to transfer. The three most restrictive flowgates that limit transfers below 150% of the Transmission Owner’s interconnected capability between the two control areas will be included in the Transmission Owner’s ATC process. Transfers between Midwest ISO, PJM and TVA will be tested at 10,000 MW level.
- § Existing flowgates on the Transmission System that do not meet any of the above criteria, have not been identified in the ATC process as a transfer limit in the past two years, and have not been identified as an operation limit in the past two years will be recommended to the Reliability Coordinator for removal. Once the models are complete and fully updated to reflect the appropriate AFC values, the Reliability Coordinator will generate the base system AFC values and flowgate response factors for all transmission flowgates monitored by the Transmission Owner.
- § The Transmission Owner recommends the addition or elimination of flowgates to the Reliability Coordinator. The Reliability Coordinator coordinates the addition or elimination of flowgates with NERC and the other members of the JRCA.

§

**(2) Reliability Coordinator Adding or Eliminating Flowgates**

- § The JRCA includes the CMP which specifies how impacted flowgates are to be determined (*see* Appendix C to the CMP included in Attachment Q).
- § The Reliability Coordinator, an Operating Entity, participates in the process and provides the list of Coordinated Flowgates to the Transmission Owner. All Impacted Flowgates identified in the JRCA process are included in the Transmission Owner’s ATC process.
- § The Reliability Coordinator may request the Transmission Owner to add a flowgate (permanent or temporary) to the ATC process. If the Transmission Owner receives a request from or through the Reliability Coordinator to add an external flowgate to its ATC process, the Transmission Owner will do so if the flowgate exceeds a 3% threshold in any of the Coordinated Flowgate tests. The

Transmission Owner will add any internal flowgate that TVA has identified as an operational limit.

- § *The RC will subtract TRM from the base system AFC values.*
- § *The RC will also subtract from the AFC values any Existing Transmission Commitments (“ETC”), and CBM*
- § *This data will be supplied to the Transmission Owner via FTP.*
- § *Using PowerGem ATC/AFC calculation software (“PowerGem”), the Transmission Owner will incorporate all data necessary to accurately model the utilization of shared flowgate capacity by participating reciprocal parties to the JRCA. The algorithms used to perform these calculations are detailed further below.*
- § *The Transmission Owner will then use the supplied data in PowerGem to determine ATC and TTC. These values will be posted on OASIS according to Section 4 of the OATT.*
- § *The Transmission Owner will evaluate transmission service requests according to the effective ATC along each path. This process is detailed in Attachment A of Attachment Q to the OATT.*
- § *The models will be updated hourly to incorporate the latest transmission service requests. Between updates, as service requests are received, the effective ATC values will be recalculated using the applicable response factors to reflect the expected effects.*

## **5) Components to the Calculation and Definitions:**

As stated above, the Transmission Owner uses an AFC methodology for calculation of ATC. AFC values are decremented by CBM and TRM to accommodate reasonable uncertainties in system conditions and provide operating flexibility to ensure secure operation of the interconnected network.

TRM is used to reserve transmission flowgate capacity in the Operating Horizon and in the Planning Horizon for uncertainty in system conditions modeled in the AFC calculation and for automatic reserve sharing (“ARS”).

CBM is used to reserve transmission flowgate capacity in the Operating Horizon (beyond 1 hr) and in the Planning Horizon to enable access to generation from interconnected systems in times of emergency generation deficiencies.

Discrete CBM and TRM values in MWs or percent are determined for each flowgate.

The Transmission Owner and the RC shall use the following components to calculate ATC for the Transmission System:

- § **TTC** is the measure of the first contingency transfer capability along a transmission path from a specified point of receipt (source) to a specified point of delivery (sink).
- § **ETC** encompasses committed uses of the transmission system, including: (1) native load commitments (including network service), (2) grandfathered transmission rights, (3) appropriate point-to-point reservations, and (4) rollover rights associated with long term firm service.
- § **TRM** is the amount of transmission transfer capability necessary to provide a reasonable level of assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and its associated effects on ATC calculations, and the need for operating flexibility to ensure reliable system operation as system conditions change. All transmission system users benefit from the preservation of TRM by Transmission Service Providers. The assumptions and components of E.ON's TRM calculation are described in detail below.
- § **CBM** is the amount of firm transmission transfer capability preserved for Load Serving Entities ("LSEs") on the host transmission system where their load is located, to enable access to generation from interconnected systems to meet generation reliability requirements. Preservation of CBM for a LSE allows that entity to reduce its installed generating capacity below what may otherwise have been necessary without interconnections to meet its generation reliability requirements. The transmission capacity preserved as CBM is intended to be used by the LSE only in times of emergency generation deficiencies.

**c. TRM:**

**i. List of databases used to calculate TRM:**

The Transmission Owner does not use any databases to calculate TRM.

**ii. TRM Assumptions and Components:**

The Transmission Owner considers the ATC margin components described in this section in its TRM calculations. Pursuant to NERC, some, or all, of the TRM component values may be set to zero. The TRM components descriptions include R.1.3.X for reference to the requirements in NERC MOD-008-0 and SERC Supplement – Transmission Reliability Margin (TRM) Methodology.

The Transmission Owner has categorized the components as Network Uncertainty, Dispatch Uncertainty, CRS Uncertainty, Load Forecast Uncertainty and Load Distribution Uncertainty. TRM value is calculated for each category of Uncertainty.

System load is a dynamic quantity. Generation increases and decreases in response to these load variations. The generation dispatch will vary for reasons such as the number of units having load following capability, generation availability, generation conditions within the generating plant, and economics. Inclusion of CRS Uncertainty and Dispatch Uncertainty

provides adequate TRM margin for this component. (R1.3.3 Balancing of generation within a Balancing Authority Area).

### **Network Uncertainty**

The flow uncertainties due to the following potential modeling inaccuracies are addressed by a TRM value for each flowgate equal to 2% of the facility rating.

### **Forecast Uncertainty**

ATC calculations performed for the Planning Horizon are based upon the most critical single contingency and does not account for the base system condition including some level of additional facility outages. (R1.3.4 Forecast uncertainty in transmission system topology). TRM provides an allowance for the impact of the myriad outages that may occur day-to-day. Settings of Phase Angle Regulators (PARs), status of series capacitors, timing of transmission system enhancements, outages beyond the first contingency, transmission facility maintenance outages and the status of operating procedures are a few of the additional uncertainties that Transmission Service Providers cannot accurately predict when calculating the ATC values. (R1.3.5 Allowances for parallel path (loop flow) Impacts). Real-time facility loading can be higher than predicted due to unaccounted for parallel path flows resulting from schedule transfers by other entities. These parallel path flows are the result of transmission service transactions that are not explicitly scheduled on the transmission system of a particular transmission provider or accounted for in their ATC process. The RC utilizes the NERC tag dump for calculation of AFC for hours 1 through 48, and the Transmission Owner utilizes transmission reservation information from BREC, EKPC, LGEE, MISO, OVEC, PJM, and TVA to reduce the magnitude of unaccounted for parallel path flows.

### **CRS Uncertainty**

Participation in MISO's Contingency Reserve Sharing ("CRS") System allows the Transmission Owner access to the operating reserves of other participants in the event of a generation outage. (CRS Uncertainty - R1.3.8 Short-term System Operator response). As such, entities with reserve sharing obligations under MISO's CRS System must set aside transmission capability to export these reserves. Similarly, transmission capability must also be set aside for importing CRS assistance from other systems. This component of TRM is the minimum value that each Transmission Provider must reserve on the flowgate and should not be sold at any time.

When applicable, this component must be considered for both CRS needs of the Transmission Provider's own transmission system as well as the CRS needs of neighboring systems. Care is taken not to over-state the CRS component of TRM when adjoining systems' TRM values sufficiently encompass the through-flow requirements. The Transmission Owner simulates the outage of certain generators of neighboring MISO CRS participants.

The calculation process to quantify this component of TRM is to modify the base generation dispatch normally provided in the power flow models to simulate the generator outage and the CRS redispatch. Transmission contingencies are simulated on the base case and the CRS dispatch case. The difference between the flows for each contingency in the two cases (normal and CRS dispatch) constitutes the TRM MW value for each flowgate for each CRS dispatch. The maximum MW value for all the CRS contingencies will determine the TRM MW value for the flowgate.

### **Dispatch Uncertainty**

The location and output of generation that is assumed in the Planning Horizon might be vastly different from actual conditions at the time of operation. (R1.3.7 Variations in generation dispatch). Variations occur as a result of unit availability and the changing cost. Variations in generating patterns can significantly affect transfer capability, especially when specific generators or combinations of generators have a substantial influence on flows over flowgates. These generators can be internal or external to the control area. TRM calculations should consider the outage of generating units at or near the limiting transmission interface, if not already considered in the determination of the TTC/ATC of that interface. Generation variations and transactions that take place by neighboring companies are not part of this component. The Transmission Owner simulates outages of internal designated network resources with redispatch to other internal resources.

The calculation process to quantify this value of the TRM component consists of modifying the generation dispatch normally provided in the power flow base case to simulate an outage of one generator with internal redispatch. Transmission contingencies are simulated on the base case and the redispatch case. The difference between the flows for each contingency in the two cases (normal and redispatch) constitutes the TRM MW value for each flowgate for each redispatch. The maximum TRM MW value for each flowgate will constitute the TRM MW value for the component.

### **Load Forecast Uncertainty**

The load forecast is subject to error, as is any forecast. (R1.3.1 Aggregate Load Forecast error). Sufficient TRM should be maintained on the network to allow for wide-area deviations from forecast load (both real and reactive) caused by severe or extreme weather and long term divergence from the economic load forecast. These deviations in real and reactive power from forecasted levels can occur due to hotter or cooler temperatures, stronger or weaker economic conditions, unforeseen (new business) or unanticipated (load growth) additions or reductions in system load, and other reasons. The Transmission Owner's load forecast is sensitive to extreme weather and long-term economic conditions. An evaluation of the 2006 Forecast indicates that the 2007 summer load could increase by 7.3% due to extreme weather and that the 2016 load levels could increase by 4.7% with "High" economic conditions.

This TRM component will be evaluated utilizing an extreme weather adjustment of 7% of MW load. The load power factor without distribution capacitor correction is typically 80-85%. Distribution capacitors are installed to correct load power factor to specified levels with normal weather. The MVAR load adjustment will be equal in magnitude to the MW adjustment assuming no additional distribution capacitor correction and to account for additional distribution transformer and distribution line losses.

The calculation process to quantify this value of the TRM component consists of modifying the load level normally provided in the power flow base case to simulate an extreme weather event for the Transmission Owner's control area. Transmission contingencies are simulated on the base case and the extreme weather case. The difference between the flows for each contingency in the two cases (normal and extreme weather) constitutes the TRM MW value for each flowgate. The maximum TRM MW value for each flowgate will constitute the TRM MW value for the component.

**Load Distribution Uncertainty**

Similar to an “error” in the aggregate load forecast, the distribution of the load will also vary the loading of system facilities. (R1.3.2 Load distribution error). The E.ON Operating Companies (LG&E/KU) have service territory that encompasses most of the state of Kentucky and five counties in Virginia and have significantly different seasonal peak characteristics due to the availability of natural gas. The load balance between KU and LG&E is fairly consistent during the months of April through October (summer months) and during the months of November through March (winter months). The LG&E load is approximately 42% of the E.ON load during the summer months with a Standard Deviation of +/- 67 MW. The LG&E load is approximately 27% of the E.ON load during the winter months with a Standard Deviation of +/- 51 MW.

This TRM component for load distribution error will utilize a load adjustment of 100 MW (approximately +/- 2 standard deviations). The load power factor will be held constant. The calculation process to quantify this value of the TRM component consists of modifying the load level normally provided in the power flow base case to a load shift between the two Operating Companies in the Transmission Owner’s control area. Transmission contingencies are simulated on the base case and each load shift case. The difference between the flows for each contingency in the two cases (normal and load shift) constitutes the TRM MW value for each component of load shift. The maximum TRM MW value for all the components will constitute the TRM MW value for the flowgate.

The Transmission Owner does not have a high concentration of load in one industry and the largest single customer is less than 150 MW. Therefore, the Transmission Owner does not consider industry specific load changes.

**USE OF TRM IN ATC CALCULATIONS**

All Firm AFC and Non-Firm AFC values include a decrement for TRM. The TRM value will include Network Uncertainty (2%), when applicable, plus the maximum of the applicable ARS, Dispatch, Load Distribution, and the Load Forecast Uncertainties as indicated in the following table:

<i>Component</i>	<i>Long-Term</i>	<i>Short Term</i>	<i>Long-Term</i>	<i>Short-Term</i>
	<i>Firm</i>	<i>Firm</i>	<i>Non-Firm</i>	<i>Non-Firm</i>
Network Uncertainty	X	X	X	
CRS Uncertainty	X	X	X	X
Dispatch Uncertainty	X	X		
Load Distribution Uncertainty	X	X		
Load Forecast Uncertainty	X			

**iii. Frequency of Calculation:**

TRM is reviewed and recalculated quarterly and will be revised, if necessary.

**d. CBM:**



The Transmission Provider does not reserve CBM on its own behalf or for other transmission customers without a specific request for CBM.

**i. CBM Procedures:**

In the event that CBM is requested in the future, LG&E/KU's LSE and other LSEs on the Transmission System requesting the use of CBM must complete the following steps:

1. Implement capacity and energy emergency plan as appropriate to reduce risk to interconnected system.
2. Communicate current and future system conditions to the LGEE Reliability Coordinator ("TVA").
3. Perform all actions necessary including bringing on all available generation, postponing equipment maintenance, scheduling interchange purchases in advance and preparing to reduce firm load.
4. Obtain available capacity and energy as required from available resources within the LGEE control area.
5. Interrupt interruptible loads and exports.
6. Declare an Energy Emergency Alert as defined by NERC through the Reliability Coordinator.
7. Issue public appeals as time permits to reduce customer usage.
8. Implement voltage reduction procedures as appropriate.

Once these steps have been completed, the LSE must request from the Transmission Owner the CBM available for import to serve the load for the applicable time period. The LSE must provide to the Transmission Owner a description of the circumstances that caused the Energy Emergency Alert that resulted in the request to utilize CBM.

As previously noted above, the Transmission Owner will identify to the LSE the paths upon which CBM may be scheduled and the amounts available for the time period of the emergency. CBM may be scheduled in one hour increments for as long as is necessary for the LSE to exit the Energy Emergency. To utilize the CBM available, the LSE must submit a schedule for CBM service for the hour of the Energy Emergency. The schedule submitted may not exceed the CBM available for the path and period specified.

Prior to approving the CBM schedule, the Transmission Owner will confirm with the Reliability Coordinator that an Energy Emergency Alert has been declared and that there is not adequate transmission capacity available to import sufficient energy into the LGEE control area to relieve the emergency. The LSE utilizing the CBM must submit an accompanying reservation through the LGEE OASIS site within 24 hours of the use.

### ***Order No. 890 Posting Requirements***

This process defines how the Transmission Owner calculates and posts narratives with regard to changes in ATC as a result of a 10% change in TTC on constrained paths for the E.ON U.S. footprint, which uses an AFC calculation methodology, as discussed in this Attachment C.

1. Each hour a process reads the input file generated by the PowerGem AFC ATC Calculator (“PAAC”) process which identifies the constraining flowgate to be used for the AFCInit and Transfer Distribution Factor (“TDF”) value on each path.
  - a. For each of the Point of Receipt/Point of Delivery (“POR\POD”) combinations defined in OASIS there will be 18 monthly entries. (Example: 32 POR\POD Combinations X 18 months = 576 entries to be evaluated.)
  - b. Calculate the TTC
    - i. For each entry  $TTC = AFCInit/TDF$
2. Each hour a process reads the previous hour’s input file generated by the PAAC process which identifies the constraining flowgate to be used for the AFCInit and TDF value on each path.
  - a. For each of the POR\POD combinations defined in OASIS there will be 18 monthly entries. (Example: 32 POR\POD Combinations X 18 months = 576 entries to be evaluated.)
  - b. Calculate the TTC
    - i. For each entry  $TTC = AFCInit /TDF$
3. Determine if the TTC change in the current hour is equal to or greater than 10% of the past hour TTC value.
  - a. If this is true then capture and record the percent change in TTC from the previous calculation and the Date Time, POR\POD, Flowgate, AFCInit, TDF, Percent Variance
  - b. If a POR\POD combination does have a 10% variance then attach a Narrative to the information posted to OASIS
  - c. Create TTC change table
    - i. Rows should be labeled for the different paths (PORPOD)
    - ii. Columns should be labeled for the upcoming 18 months being calculated
    - iii. Check to see when the monthly file is updated and then only compare the 16 months that overlap instead of the 18 months.
  - d. Retrieve data for table
  - e. Retrieve load and generation data from the monthly summary file
  - f. Retrieve outage information

- g. Retrieve flowgate change and rating data
    - h. Populate the table with comparisons made
- 4. Post each hour's table on OASIS when 10% variance occurs

**ATTACHMENT D**  
**METHODOLOGY FOR COMPLETING A SYSTEM IMPACT STUDY**

The Transmission Owner will assess the capability of its transmission system in order to provide transmission service to a qualified requester. The Transmission Owner will make a nondiscriminatory determination as to whether sufficient transfer capability exists to accommodate the request. If it is determined that a System Impact Study is required, the Transmission Owner will notify the requesting party and tender a System Impact Study Agreement.

The available point-to-point transfer capability will be the remaining transmission capability after accounting for the Transmission Owner's requirements to serve its Native Load Customers including adjustments for TRM and CBM and any other contractual commitments for Network Integration Service or Firm Point-to-Point Transmission Service agreements.

The Transmission Owner will adhere to Good Utility practice, NERC guidelines, and regional procedures and criteria when conducting the studies. In addition, the Transmission Owner will apply its own criteria, which are contained in the Transmission Owner's FERC 715 filing. These criteria will be used to evaluate the performance of the Transmission Owner's Transmission System. Unacceptable performance would consist of conditions such as transmission loading in excess of first contingency criteria, unacceptable voltage, or the loss of power system stability that would result in the cascading loss of generation or transmission lines.

In addition to the studies mentioned in the above, it may be necessary to perform System Impact Studies for seasonal load levels, off-peak load levels, and/or multi-year periods.

**ATTACHMENT E**  
**INDEX OF EXISTING TRANSMISSION CUSTOMERS**

1. This Attachment E provides a list of all transmission agreements, grandfathered agreements, and OASIS reservations in place as of December 28, 2004. Pursuant to the terms of the Midwest ISO's Transmission Owner's Agreement Article V, as interpreted in *Louisville Gas & Electric Co., et al.* 114 FERC ¶ 61,282 (2006), all transmission agreements, GFAs, and OASIS reservations in place as of December 28, 2004 will receive service subject to the "service and pricing that they would have been entitled to receive, absent Applicants' withdrawal," (*Id.* at P 45) until said agreements, GFAs, or OASIS reservations terminate. The terms of this "hold harmless" requirement are found at Section 15.8 of this Tariff.

Transmission Service Agreements:

The numbers referred to herein reference the original request made on the Midwest ISO OASIS.

IMEA Agreement 1: #76047112, Customer IMEA, Source LGEE, Sink Illinois Power (MISO IP), Start 10/1/2004, End 3/1/2023, 62 MW

IMEA Agreement 2: #75230122, Customer IMEA, Source LGEE, Sink Illinois Power (MISO IP), Start 1/1/2007, End 1/1/2020, 91 MW

Hoosier Energy Agreement: #76285513, Customer Hoosier Energy, Source Hoosier Energy (LGEE), Sink LGEE, Start 4/1/2005, End 1/1/2012, 10 MW

EKPC Agreement 1: #76285505, Customer EKPC, Source EKPC (LGEE), Sink LGEE, Start 4/1/2005, End 1/1/2016, 3 MW

Grandfathered Agreements:

The contract numbers assigned to the following grandfathered agreements refer to the numbers assigned to them in the Midwest ISO Attachment P.

IMPA Agreement 1: #214, LG&E FERC Rate Schedule No. 35, Customer IMPA, Interconnection Agreement, Dated 2/7/1989

EKPC Agreement 2: #215, LG&E FERC Rate Schedule No. 25, Customer EKPC, Interconnection Agreement, Dated 8/14/1968, Cancellation Notice given 9/13/2004, effective 9/13/2006

Ohio Valley Electric Cooperative: #216, LG&E FERC Rate Schedule No. 32, Customer Ohio Valley Electric Cooperative, Interconnection Agreement, no date given

IMPA Agreement 2: #217, Customer IMPA, LG&E FERC Rate Schedule No. 31, Interconnection Agreement, no date given

EKPC Agreement 3: #218, LG&E FERC Rate Schedule No. 25, Customer EKPC, Transmission Lease Agreement, Dated 4/17/1989

TVA and CG&E Agreement: #219, FERC Rate Schedule Unknown, Customers TVA and CG&E, Interconnection Agreement, Dated 9/23/1957

EKPC Agreement 4: #220, KU FERC Rate Schedule No. 203, Customer EKPC, Interconnection Agreement, Dated 10/22/1994, Cancellation Notice given 8/8/2002, effective 8/8/2006

EKPC Agreement 5: #221, KU FERC Rate Schedule No. 213, Customer EKPC, Transmission Agreement, Dated 2/9/2005, Cancellation notice given 1/5/2005, effective 1/5/2006

Electric Energy, Inc., et al. Agreement: #222, KU FERC Rate Schedule No. 199, Electric Energy, Inc., Central Illinois Public Service Co., Illinois Power Co., and Union Electric Co., Power Supply Agreement, Dated 9/2/1987

City of Owensboro Agreement: #223, KU FERC Rate Schedule No. 74, Customer City of Owensboro City Utility Commission, Agreement, Dated 9/30/1960

Atomic Energy Agreement: #224, FERC Rate Schedule Unknown, Customer Atomic Energy Commission, Power Agreement, Dated 10/15/1952

TVA Agreement: #225, KU FERC Rate Schedule 93, Customer TVA, Interconnection Agreement, Dated 3/22/1951

KU Municipals Agreement 1: #418, FERC Rate Schedule Unknown, Customers City Utilities Commission of Barbourville; Bardstown Municipal Electric Light & Power; Bardwell City Utilities; The Electric Plant Board of Benham; Berea College (subsequently assigned to City of Berea); Corbin City Utilities Commission; Falmouth City Utilities; Frankfort Electric & Water Plant Board; City of Madisonville; City of Nicholasville; and Providence Electric Department, Kentucky, Contract for Electric Service, Dated 1987 to 1990

KU Municipals Agreement 2: #419, FERC Rate Schedule Unknown, Customer City of Paris, Kentucky, Interchange Agreement, Dated 9/7/1990

KU Municipals Agreement 3: #420, FERC Rate Schedule Unknown, Customers City Utilities Commission of Barbourville; Bardstown Municipal Electric Light & Power; Bardwell City Utilities; The Electric Plant Board of Benham; Corbin City Utilities Commission; Falmouth City Utilities; Frankfort Electric & Water Plant Board; City of Madisonville; City of Nicholasville; Providence Electric Department; City of Paris; and City of Owensboro, Various SEPA Contracts, Dated 12/31/1996

2. The following comprises a complete list of Transmission Customers as of July 13, 2007; only those agreements specifically listed in Section 1 above receive the “hold harmless” treatment described in Section 15.8 of this Tariff. NOTE: These are customers who have signed service agreements; not all are currently taking service over the Transmission System.

§ IMEA, effective September 1, 2006, for Long-Term Firm Service

- § IMEA, effective January 1, 2010, for Long-Term Firm Service
- § IMPA, effective January 1, 2010, for Long-Term Firm Service
- § LG&E/KU, effective September 1, 2006, for Long-Term Firm Service
- § LG&E/KU, effective September 1, 2006, for Short-Term Non-Firm Service
- § LG&E Energy Marketing, effective September 1, 2006, for Long-Term Firm Service
- § LG&E Energy Marketing, effective September 1, 2006, for Short-Term Non-Firm Service
- § IMPA, effective September 1, 2006, for Short-Term Firm Service
- § IMPA, effective September 1, 2006, for Short-Term Non-Firm Service
- § Cargill Power Markets, effective September 6, 2006, for Short-Term Firm Service
- § Cargill Power Markets, effective September 6, 2006, for Short-Term Non-Firm Service
- § DTE Energy Trading, Inc., effective September 1, 2006, for Short-Term Firm Service
- § DTE Energy Trading, Inc., effective September 1, 2006, for Short-Term Non-Firm Service
- § The Energy Authority, effective October 15, 2006, for Short-Term Firm Service
- § The Energy Authority, effective October 15, 2006, for Short-Term Non-Firm Service
- § TVA, effective October 15, 2006 for Short-Term Firm Service
- § TVA, effective October 15, 2006, for Short-Term Non-Firm Service
- § Dynegy Power Marketing, Inc., effective October 15, 2006, for Short-Term Non-Firm Service
- § Dynegy Power Marketing, Inc., effective October 15, 2006, for Short-Term Firm Service
- § East Kentucky Power Cooperative, Inc., effective October 24, 2006, for Short-Term Firm Service
- § East Kentucky Power Cooperative, Inc., effective October 24, 2006, for Short-Term Non-Firm Service
- § MidAmerican Energy Company, effective October 31, 2006, for Short-Term Firm Service
- § MidAmerican Energy Company, effective October 31, 2006, for Short-Term Non-Firm Service

- § American Electric Power Company, Inc., effective December 14, 2006, for Short-Term Firm Service
- § American Electric Power Company, Inc., effective December 14, 2006, for Short-Term Non-Firm Service
- § Big Rivers Electric Corporation, effective February 3, 2007, for Short-Term Non-Firm Service



**ATTACHMENT F**  
**SERVICE AGREEMENT FOR NETWORK INTEGRATION TRANSMISSION**  
**SERVICE**

This Service Agreement, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, is by and between Louisville Gas & Electric/Kentucky Utilities (“LG&E/KU” or “Transmission Owner”) and \_\_\_\_\_ (“Transmission Customer”).

Transmission Owner will make available to Transmission Customer the Network Integration Transmission Service identified in Transmission Owner’s Transmission Service Tariff (hereinafter referred to as the Tariff). Transmission Owner and Transmission Customer agree to all terms and conditions set forth in the Tariff as may be in effect from time to time. Transmission Customer must fulfill requirements outlined in Section 29.1, Conditions Precedent for Receiving Service.

Any notice or request made to or by Transmission Owner or Transmission Customer regarding this Service Agreement shall be made in writing and shall be telecommunicated or delivered either in person or by prepaid mail to the representative of the other party as indicated below. Such representative and address for notices or requests may be changed from time to time by notice by one party to the other.

Service under this Service 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 Service Agreement shall terminate on \_\_\_\_\_.

TRANSMISSION OWNER:  
\_\_\_\_\_

TRANSMISSION CUSTOMER:  
\_\_\_\_\_

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

Transmission Customer:

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

Transmission Owner:

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

**SPECIFICATIONS FOR NETWORK INTEGRATION TRANSMISSION SERVICE**

1.0 Term of Network Service: \_\_\_\_\_

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

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

2.0 Description of capacity and/or energy to be transmitted by Transmission Owner across its Transmission System (including electric control area in which the transaction originates).

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3.0 Network Resources

(1) Transmission Customer Generation Owned:

Resource Capacity Designated as Network Resource

(2) Transmission Customer Generation Purchased:

Source Capacity

Total Network Resources: (1) + (2) = \_\_\_\_\_

4.0 Network Load

Transmission Customer Loads:

Transmission

Voltage

Location

Level

Total MWs

Interruptible MWs

Total MWs: \_\_\_\_\_

Total Interruptible MWs: \_\_\_\_\_

5.0 Designation of party subject to reciprocal service obligation:

6.0 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.)

6.1 Load Ratio Share of Annual Transmission Revenue Requirement:

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6.2 Facilities Study Charge:

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6.3 Direct Assignment Facilities Charge:

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6.4 Ancillary Services Charge:

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6.5 Redispatch Charges:

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**ATTACHMENT G**  
**NETWORK OPERATING AGREEMENT**

This agreement, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, and effective as of \_\_\_\_\_ by and between Louisville Gas & Electric/Kentucky Utilities (“LG&E/KU” or “Transmission Owner”) and \_\_\_\_\_ (“Network Customer”).

The Parties agree that the provisions of this Network Operating Agreement and the Network Integration Transmission Service Agreement govern the provision of transmission services in accordance with the Open Access Transmission Tariff (“Tariff”) as it may be amended from time to time.

This Network Operating Agreement defines the terms and conditions under which the Network Customer shall operate its facilities and the technical and operational matters associated with the implementation of the Tariff. The Transmission Owner and the Network Customer shall (i) operate and maintain equipment necessary for integrating the Network Customer within LG&E/KU’s Transmission System (including, but not limited to, remote terminal units (RTU’s), metering, communications equipment and relaying equipment) according to Good Utility Practice. In furtherance of this requirement, such Parties agree the following listed items shall apply to service hereunder: RTU’s: \_\_\_\_\_, Metering: \_\_\_\_\_, Communications Equipment: \_\_\_\_\_, Relaying Equipment: \_\_\_\_\_, Other: \_\_\_\_\_

**The Operating Committee** shall consist of one representative and an alternate representative of each Party. The duties of the Operating Committee shall include the following:

- (a) Establish procedures and rules for making the billing computations, and be responsible for the making of such computations;
- (b) Establish appropriate procedures in order to carry out the requirements of North American Electric Reliability Corporation (NERC) and the then-current regional reliability organization; and
- (c) Assemble and exchange information necessary for transmission planning.

If the Operating Committee is unable to agree unanimously on a matter coming under its jurisdiction, such matter may, if mutually agreed to by Transmission Owner and Network Customer, be resolved by arbitration under the Kentucky Uniform Arbitration Act as amended.

**Redispatch Procedures** shall include the following:

- (a) If the Control Area operator, determines that redispatching resources (including reductions in off-system purchases and sales) to relieve an existing or potential transmission constraint is the most effective way to ensure the reliable operation of the Transmission System, the Control Area operator will redispatch Network Resources and the Transmission Owner’s own resources on a least-cost basis, without regard to the ownership of such resources. The Control Area Operator will apprise the Network Customer of its redispatch practices and procedures, as they may be modified from time to time.

- (b) The Network Customer will submit verifiable cost data for its resources, which estimates the cost to the Network Customer of changing the generation output of each of its Network Resources, to the Transmission Owner. This cost data will be used, along with similar data for the Transmission Owner's resources, as the basis for least-cost redispatch. The Transmission Owner's bulk power operations personnel will keep this data confidential, and will not disclose it to the Transmission Owner's marketing personnel. If the Network Customer experiences changes to its costs, the Network Customer will submit those changes to the Transmission Owner. Based on this information, the Control Area Operator will implement least-cost redispatch consistent with existing contractual obligations and current practices and procedures applicable to the Transmission Owner's resources. The Network Customer shall respond immediately to requests for redispatch from the Control Area Operator.
- (c) The Network Customer may audit, at its own expense, redispatch events (such as the cause or necessity of the redispatch) during normal business hours following reasonable notice to the Transmission Owner. The Network Customer and Transmission Owner may request an audit of the Transmission Owner and/or Network Customer's cost data. Any audit of cost data will be performed by an additional independent agent at the requesting party's cost. Such independent agent will be a nationally recognized accounting firm and will be required to keep all cost data confidential.
- (d) Once redispatch has been implemented, the Transmission Owner will book in a separate account the redispatch costs incurred by the Transmission Owner and the Network Customer based on the submitted cost data. The Transmission Owner and the Network Customer will each bear a proportional share of the total redispatch costs based on their then-current Load Ratio Shares. The redispatch charge or credit, as appropriate, will be reflected on the Network Customer's monthly bill.

**Metering** requirements shall include the following:

- (a) The Network Customer will be responsible for the purchase, installation, operation, maintenance, repair and replacement of all metering equipment necessary to provide Network Integration Service. All metering equipment of the Network Customer shall conform to Good Utility Practice and the standards and practices of the Transmission Owner's Control Area. Prior to its installation, the Transmission Owner and the Network Customer shall review the metering equipment to ensure conformance with such standards or practices.
- (b) Electric capacity and energy received by the Transmission Owner from the Network Customer will be measured by meters installed at the Network Customer's Network Resources that are located on the Transmission Owner's system (if any). When measurement is made at any location other than a point of receipt, suitable adjustment for losses between the point of measurement and the point of receipt will be agreed upon in writing between the Transmission Owner and Network Customer and will be applied to all measurements so made. Metered

receipts used in billing and accounting hereunder will in all cases include adjustments for such losses.

- (c) Electric capacity and energy delivered to the Network Customer's Network Loads by the Transmission Owner will be measured by meters installed at the delivery point to such Network Loads. When measurement is made at any location other than a point of delivery, suitable adjustment for losses between the point of measurement and the point of delivery will be agreed upon in writing between the Transmission Owner and Network Customer and will be applied to all measurements so made. Metered receipts used in billing and accounting hereunder will in all cases include adjustments for such losses.
- (d) Meters at the Network Customer's Network Resources that are located on the Transmission Owner's system, if any and Network Loads will be tested at least biennially. Representatives of the Transmission Owner will be afforded an opportunity to witness such tests.
- (e) The Network Customer will, upon request of the Transmission Owner, test any meter at its Network Resources that are located on the Transmission Owner's system, if any, or Network Loads used for determining the receipt or delivery of capacity and energy by the Transmission Owner. In the event the test shows the meter to be inaccurate, the Network Customer will make any necessary adjustments, repairs or replacements thereon as soon as practicable. In the event the test shows the meter to be accurate, the Transmission Owner will reimburse the Network Customer its costs for performing the test.
- (f) In the event any meter used to measure capacity and energy fails to register or is found to be inaccurate, appropriate billing adjustments, based on the best information available, will be agreed upon by the Transmission Owner and Network Customer hereto. Any meter tested and found to be not more than one (1) percent above or below normal will be considered to be correct and accurate insofar as correction of billing is concerned. If, as a result of any test, a meter is found to register in excess of one (1) percent either above or below normal, then the reading of such meter previously taken will be corrected according to the percentage of inaccuracy so found, but no correction will extend beyond ninety (90) days previous to the day on which inaccuracy is discovered by such test.
- (g) The Transmission Owner will have the right to install suitable metering equipment at any point(s) of receipt for Network Resources located on the Transmission Owner's system, if any, or delivery, as herein provided for the purpose of checking the meters installed by the Network Customer.
- (h) The Network Customer will read the meters owned by it, except as may be mutually agreed by the Transmission Owner and the Network Customer, and will furnish to the Transmission Owner all meter readings and other information required for operations and for billing purposes. Such information will remain available to the Transmission Owner for three (3) years.

**Control Area and Data Equipment** requirements shall include the following:

- (a) The Network Customer will be responsible for the purchase, installation, operation, maintenance, repair and replacement of all data acquisition equipment, metering equipment, protection equipment, and any other associated equipment and software, which may be required by the Transmission Owner for the Network Customer to operate in accordance with the Metering Requirements of this NOA. Such equipment shall conform to Good Utility Practice and the standards and practices of the Transmission Owner's Control Area. Prior to its installation, the Transmission Owner and the Network Customer shall review the equipment and software required by this Section to ensure conformance with such standards or practices.
- (b) The Transmission Owner, using reasonable discretion, shall select the real time telemetry and data to be received by the Transmission Owner and the Network Customer as deemed necessary for reliability, security, economics, and/or monitoring of system operations. This telemetry includes, but is not limited to, loads, line flows, voltages, generator output, and breaker status at any of the Network Customer's transmission facilities. To the extent telemetry is required that is not available, the Network Customer shall, at its own expense, install any metering equipment, data acquisition equipment, or other equipment and software necessary for the telemetry to be received by the Transmission Owner. The Transmission Owner shall consult with the Control Area Operator regarding the necessary data and telemetry needed for reliability, security, economics, and/or monitoring of system operations.
- (c) The Transmission Owner and Network Customer shall be responsible for implementing any computer modifications or changes required to their own computer system(s) as necessary to implement this Section (Control Area and Data Equipment).

**Operating Requirements** shall include the following:

- (a) The Network Customer shall operate its generating resources located on the Transmission Owner's system, if any in a manner consistent with that of the Transmission Owner, following voltage schedules, free governor response, meeting power factor requirements at the point of interconnection of such generating resources with the Transmission Owner's system, and other such criteria required by NERC, SERC and VACAR and consistently adhered to by the Transmission Owner.
- (b) Insofar as practicable, the Transmission Owner and the Network Customer shall protect, operate, and maintain their respective systems so as to avoid or minimize the likelihood of disturbances which might cause impairment of service on the system(s) of the other. Such parties shall implement load shedding programs to maintain the reliability and integrity of the Transmission Systems, as provided in Section 34.6 of the Tariff. Load shedding shall include: (1) automatic load shedding by underfrequency relay or (2) manual load shedding. The Transmission Owner will implement load shedding to maintain the relative sizes of load served, unless otherwise required by circumstances beyond the control of the Transmission Owner or the Network Customer. Automatic load shedding devices

will operate without notice. When manual load shedding is necessary, the Transmission Owner shall notify the Network Customer's dispatchers or schedulers of the required action and the Network Customer shall comply immediately.

- (c) The Network Customer shall, at its own expense, provide, operate, and maintain or cause to be provided, operated, and maintained in service high-speed, under frequency load shedding equipment. The Network Customer will install or cause to be installed underfrequency relays to disconnect automatically approximately fifty percent (50%) of its Network Load in a manner consistent with that followed by the Transmission Owner, which is five steps of approximately ten percent (10%) each at frequency set points of 59.5 Hertz, 59.3 Hertz, 59.1 Hertz, 58.9 Hertz and 58.7 Hertz. The installation of underfrequency relays to accomplish any additional load shedding above that already installed shall be completed on a schedule agreed to by the Operating Committee. The Operating Committee may review the amount of load that would be disconnected automatically and make such adjustments and changes as necessary.
- (d) In the event the Transmission Owner modifies the load shedding system, the Network Customer shall, at its expense, make changes, or cause such changes to be made, to the load shedding equipment and setting of such equipment, as required. The Network Customer shall test and inspect the load shedding equipment within ninety (90) days of taking Network Integration Transmission Service under the Tariff and thereafter in accordance with Good Utility Practice, and provide a written report to the Transmission Owner. The Transmission Owner may request a test of the load shedding equipment with reasonable notice.

### **Operational Information**

The Network Customer shall provide data needed for the safe and reliable operation of the Network Customer's and the Transmission Owner's respective facilities and to implement the provisions of the Tariff. The Transmission Owner will treat this information as confidential and will not divulge it to its marketing personnel.

- (a) The Network Customer shall provide by December 1st of each year the Customer's Network Resource availability forecast (e.g., all planned resource outages, including off-line and on-line dates) for the following year. Such forecast shall be made in accordance with Good Utility Practice, and shall include consideration of the Network Customer's peak load data from the most recent summer peak. The Network Customer shall inform the Transmission Owner, in a timely manner, of any changes to the Network Customer's Network Resource availability forecast. In the event that the Transmission Owner determines that such forecast cannot be accommodated due to a transmission constraint on its Transmission System, and such constraint may jeopardize the security of the Transmission System or adversely affect the economic operation of either the Transmission Owner's system or the Network Customer's facilities, the provisions of Section 33 of the Tariff will be implemented.
- (b) The Network Customer shall provide, at least 36 hours in advance of every calendar day, the Network Customer's best forecast of any planned transmission



or Network Resource outage(s) and other operating information that the Transmission Owner deems appropriate. In the event that such planned outages cannot be accommodated due to a transmission constraint on the Transmission Owner's Transmission System, the provisions of Section 33 of the Tariff will be implemented.

- (c) The Transmission Owner and the Network Customer shall notify and coordinate with the other party prior to the commencement of any work by either party (or contractors or agents performing on their behalf), which may directly or indirectly have an adverse effect on the facilities of the other party.

### **Network Planning**

In order for the Transmission Owner to plan, on an ongoing basis, to meet the Network Customer's requirements for Network Integration Transmission Service, the Network Customer shall provide to the Transmission Owner, by December 1st of each year, updated information (current year and 10-year projection) for Network Loads and Network Resources, as well as any other information reasonably necessary to plan for Network Integration Service. The forecast shall include consideration of the Network Customer's peak load data from the most recent summer peak. This type of information is consistent with the information requirements for the Transmission Owner's planning to serve its Native Load Customers. The data will be provided in a format consistent with that used by the Transmission Owner and its Reliability Coordinator.

### **Character of Service**

Power and energy delivered under the Service Agreement and this NOA shall be delivered as three-phase alternating current at a frequency of approximately sixty (60) Hertz, and at the nominal voltages at the delivery and receipt points.

### **Transfer of Power and Energy Through Other Systems**

Since the Transmission Owner's Transmission System is, and will be, directly and indirectly connected with other electric systems, it is recognized that, because of the physical and electrical characteristics of the facilities involved, power delivered under the Service Agreement and this NOA may flow through such other systems. The Transmission Owner and the Network Customer agree to advise other electric systems as deemed appropriate of such scheduled transfers and to attempt to maintain good relationships with affected third parties.

### **Notice**

Any Notice or request made to or by any party regarding this NOA shall be made to the representative of each party as indicated in the Service Agreement for Network Integration Transmission Service.

### **Incorporation**

The Tariff and the Service Agreement are incorporated herein and made a part hereof.

### **Term**

The term of this NOA shall be concurrent with the term of the Service Agreement between the parties.

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

Network Customer:

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

Transmission Owner:

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

**ATTACHMENT H**  
**RESERVED**

**ATTACHMENT I**  
**INDEX OF NETWORK INTEGRATION TRANSMISSION SERVICE CUSTOMERS**

<u>Customer</u>	<u>Date of Service Agreement</u>
East Kentucky Power Cooperative -For the Long Run, Oxford, Southpoint and Gallatin Steel Delivery Points	Effective date of this Tariff
Hoosier Energy Rural Electric Cooperative – Bridgeport Delivery Point	Effective date of this Tariff
Louisville Gas & Electric Company/Kentucky Utilities Company– All Delivery Points	Effective date of this Tariff

## **ATTACHMENT J**

The North American Electric Reliability Corporation's ("NERC")'s Transmission Loading Relief ("TLR") Procedures originally filed March 18, 1998, which are now the mandatory Reliability Standards that address TLR, and any amendments thereto, on file and accepted by the Commission, 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 TLR Procedures.

## **ATTACHMENT K**

### **TRANSMISSION PLANNING PROCESS**

On February 16, 2007, the Federal Energy Regulatory Commission (“FERC”) issued Order No. 890, *Preventing Undue Discrimination and Preference in Transmission Service*. Pursuant to the terms of Order No. 890, E.ON U.S., LLC, as authorized agent for and on behalf of its transmission-owning operating companies, Louisville Gas and Electric Company (“LG&E”) and Kentucky Utilities Company (“KU”), has drafted the following procedures in conformance with Order No. 890’s transmission planning principles.

#### **I. Coordination**

FERC requires that transmission providers meet with and allow stakeholders to have input into the transmission planning process. FERC does not mandate the number of, or scope of, meetings with stakeholders, so long as the coordination process allows stakeholders an opportunity to comment meaningfully at the early stages of the transmission plan’s development. E.ON has developed the plan so that stakeholders will be able to provide input into the next years’ plan as that plan is developed from the initial stages of development, and encourages stakeholders to be involved early in the process, as opposed to commenting only on the final plan.

§ Describe whether any committees or meeting structures (formal or informal) will be used to conduct planning activities.

#### **Stakeholder Planning Committee**

The E.ON U.S. coordination plan will include the formation of a Stakeholder Planning Committee (“SPC”), which will act as a standing committee. The SPC will provide a forum for stakeholders to provide input to the Transmission Owner regarding the transmission planning process.

Membership on the SPC will be open to all interested parties. Any interested party that wants to participate in the SPC must designate a representative by sending such information to the Transmission Owner (and providing contact information for the representative) within 30 days of Commission approval of the Transmission Owner’s coordination plan. After this 30 day start-up period, an interested party may join the SPC by designating a representative (and providing contact information for the representative) and sending a notice to the Transmission Owner and the Chair of the SPC.

The Transmission Owner shall be responsible for coordinating the first meeting of the SPC within 120 days of approval of the Transmission Owner’s coordination plan. Afterwards, the SPC shall appoint a Chair to lead the SPC calls and coordinate any teleconferences or meetings. The Chair shall rotate annually among the members of the SPC. The SPC shall hold conference calls monthly, or quarterly, depending upon the workload at the time, to provide

input to the Transmission Owner regarding planning issues. If required, the Chair may call meetings on a more frequent basis.

Upon formation, the SPC will provide a forum to allow members the opportunity to comment on the development of accurate data inputs for study simulations, the appropriateness of study simulations being performed, and the correctness of the execution of study simulations. The SPC will also enable members to review study results as they are performed over the study development cycle. The SPC will also provide an opportunity to produce comments and reports. Further, the SPC will be responsible for forming an Economic Expansion Subcommittee.

The SPC will decide its own processes and procedures, including frequency, location and format of meetings; membership criteria (e.g., number of representatives per Eligible Customer, provisions for alternates). The SPC will also determine the responsibilities of the SPC Chair, such as: supervision of SPC activities, scheduling and posting notice of meetings, developing agendas, and presiding at meetings. Although the Transmission Owner is not a formal member of the SPC, the Transmission Owner will be invited to participate in all SPC activities.

It is the Transmission Owner's intent that issues before the SPC be resolved on a consensus basis; nevertheless, there may be circumstances where sending an issue to a vote would be appropriate. Because of the SPC's potential breadth, if and when the SPC needs to vote on certain issues, each SPC member's vote will be weighted based on whether the member represents a current Transmission or NITS Customer, an Eligible Customer, a regulatory body, a developer of transmission, generation or demand resources, or the general public (i.e., an unaffiliated individual). The Transmission Owner has set out suggested voting weights below, but the SPC is free to modify this allocation once it is fully operational.

<b>SPC Member</b>	<b>Weighted Vote</b>
Current Transmission Customer	1.00
Current NITS Customer	1.00
Eligible Customer	1.00
Regulatory Body (KPSC, FERC, or similar)	1.00
Developers of Transmission	1.00
Developers of Generation	1.00
Developers of Demand Resources	1.00
General Public	0.10

### Transmission Planning Cycle

The Transmission Owner's coordination plan involves a combination of SPC meetings and semi-annual stakeholder meetings to discuss draft annual transmission expansion plans, as well as opportunities for stakeholders to provide written comments early in the process. The transmission planning process is an approximately 15 month cycle.<sup>7</sup> The transmission planning

<sup>7</sup> A flowchart depicting the planning cycle is attached as Appendix 2.

process will begin in January with the Transmission Owner starting the process of running the required planning models for the next planning year (e.g., in January 2008 for the 2009 planning



year).<sup>8</sup> Between January and the spring semi-annual stakeholder meeting the SPC will hold either quarterly or monthly meetings to update stakeholders on the status of the next year's transmission plan and provide an opportunity for stakeholders to comment, both on the development of the transmission plan and on the criteria, data, and assumptions used by the Transmission Owner in developing the annual transmission plan.

The spring stakeholder meeting serves two functions in the transmission planning cycle.

- **Review ongoing development of Next Year's plan-** First, the Transmission Owner will issue a request for stakeholder input on development of the next year's transmission plan (e.g., in Spring 2008 for 2009 planning year). Stakeholders will have thirty days from the spring meeting in which to transmit their additional suggestions for the next year's transmission plan.
- **Finalize Current Year's Transmission plan-** Second, the spring stakeholder meeting also involves the presentation of the final draft transmission plan. The Transmission Owner will present its comments on the final version of the annual transmission expansion plan for the current year, and will receive comments. Stakeholders may submit written comments for up to 30 days after the spring meeting on the current year's plan.

Fifteen days prior to the fall stakeholder meeting, the Transmission Owner will distribute the draft transmission plan for the next year (e.g., in Fall of 2008, the Transmission Owner will distribute its draft for the 2009 planning year, which incorporates all comments received from stakeholders on the 2009 plan between January and Fall of 2008). Stakeholders will have an opportunity to discuss the draft transmission plan at the fall stakeholder meeting, and may submit written comments regarding the draft transmission plan for up to 30 days following the fall stakeholder meeting.

Between the spring and fall stakeholder meetings, the SPC will continue to hold quarterly or monthly meetings on the state of the next year's transmission plan and will have opportunities to comment on plan development.

Additionally, stakeholder input is not restricted to the SPC and semi-annual stakeholder meetings but can be sent to the Manager of Transmission or the SPC at any time. Written comments are preferred and may be sent via e-mail. Comments received outside the semi-annual meetings and SPC meetings will be made available to other stakeholders via OASIS.

§ Describe what role the transmission provider will play in coordinating the activities of the planning committees or meetings, as relevant.

The Transmission Owner is the entity responsible for drafting the annual transmission plan, with input from the SPC and stakeholders. The SPC will be responsible for coordinating the monthly and quarterly conference calls and will provide input to the TO on planning issues at

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<sup>8</sup> For purposes of this section Current Year means the current calendar year, Next Year means the next calendar year following the current year.

that time. The Transmission Owner will be responsible for coordinating the semi-annual stakeholder meetings, will present the annual transmission plan, or draft of the annual transmission plan as appropriate, and will take stakeholder comments at that time. Stakeholders also may address their written comments to the Transmission Owner or the SPC, which the Transmission Owner will take into account when drafting or revising the annual transmission expansion plan.

§ Describe any existing processes, and the changes thereto, that will be used to satisfy the requirements of Order No. 890.

The Transmission Owner already holds an annual stakeholder meeting to address customer and other stakeholder issues. Transmission expansion planning has been added to this process, and an additional meeting added to the yearly calendar. Additionally, the scope of stakeholders invited to participate in the meetings will be expanded for transmission planning meetings to include interested parties, neighboring transmission systems, and state commission representatives, as well as customers.

§ Describe the frequency of meetings to be held and other planning-related communications.

SPC meetings will occur quarterly, monthly, or more often, as determined by the SPC or its Chair.

§ Describe the procedures used to notice meetings and other planning-related communications.

Notice of the monthly or quarterly teleconference meetings of the SPC will be sent out by the Transmission Owner for the first meeting to a list of Eligible Customers based on those that inform the Transmission Owner of their interest in participating in the SPC. Afterward, the Chair of the SPC will be in charge of coordinating and notifying the SPC members of the conference calls. A notice of the semi-annual meetings will be placed on OASIS, as well as the Transmission Owner's website. Customers will receive an e-mail notifying them of the meeting, and other stakeholders (neighboring transmission systems, state commission representatives) will be invited by the Transmission Owner. Meetings will take place in person in Louisville, Kentucky. If participants are unable to attend in person, a teleconference line will be made available.

Any significant planning developments or events will trigger a posting by the Transmission Owner on OASIS to notify the SPC and any other Eligible customer under the OATT of the opportunity to provide input during the planning process with regard to the significant development or event.

## II. Openness

§ Describe who the participants will be in the planning process, including expected participants for any groups or committees used.

Except as noted below, the transmission planning portion of the stakeholder meetings will be open to any interested party, including current Transmission and Network Customers, representatives from the Kentucky Public Service Commission, and utilities with whom the Transmission Owner's transmission system is interconnected. Entities attending the transmission planning portion of the stakeholder meetings will be invited to provide their comments, concerns, or relevant study data using the procedures set forth in Part I above.

If a stakeholder meeting will include discussion of CEII and/or non-CEII confidential information, the Transmission Owner will provide notice to stakeholders beforehand, together with an opportunity to execute the appropriate confidentiality agreements (if the stakeholder has not already executed one), so that the stakeholder can participate in such meeting. In the alternative, stakeholder meetings will be structured to have separate discussion of issues involving CEII and/or non-CEII confidential data, with only those participants who have agreed to execute the applicable confidentiality agreements.<sup>9</sup>

#### 1. Critical Energy Infrastructure Information Confidentiality Agreement

The Transmission Owner will use a Critical Energy Infrastructure Information Confidentiality Agreement, included in Appendix 1 to this Attachment K, to address sharing of potential Critical Energy Infrastructure Information or similar information (collectively "CEII"). Any File Transfer Protocol ("FTP") sites containing such information will require such agreement to be executed in order to obtain access.

In order to request a CEII, a requestor must first complete the SPC CEII Request form, included as Appendix 4 to this Attachment K. This form requests information about the requestor, the requestor's employer or client, a description of the information requested, and a statement concerning the specific need for and intended use of the information requested. The requestor must also complete an SPC Background Authorization, the form of which will be posted on OASIS and is included in Appendix 4. If the requestor is required to view the information to participate in the planning process described in this Attachment K, and the request is confirmed to have been submitted by the requestor, the background check will be performed. Upon passing the background check, the requestor will be asked to sign the CEII Confidentiality Agreement described above. A flow diagram of the CEII Certification Procedure is also contained in Appendix 4.

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<sup>9</sup> The Confidentiality Agreements attached in Appendix 1 apply to non-CEII and CEII Confidential Transmission Planning Information separately. A stakeholder may only participate in those portions of meetings or access those portions of applicable websites to the extent it has executed the appropriate Confidentiality Agreement.

## 2. Non-CEII Confidential Information

The Transmission Owner will use a non-CEII Confidentiality Agreement included in Appendix 1 to this Attachment K, to address sharing of potential confidential transmission planning information that is non-CEII but confidential. Any FTP sites containing such information will require such agreement to be executed in order to obtain access. If a stakeholder meeting will include discussion of non-CEII confidential information, the Transmission Owner will provide notice to stakeholders beforehand, together with an opportunity to execute a non-CEII Confidentiality Agreement (if the stakeholder has not already executed one), so that the stakeholder can participate in such meeting. In the alternative, stakeholder meetings will be structured to have separate discussion of issues involving non-CEII confidential data, with only those participants who have agreed to execute the applicable confidentiality agreement.

## 3. Non-Confidential Information and Non-CEII

The Transmission Owner will not use a confidentiality agreement, to address sharing information that is neither CEII nor confidential transmission planning information. If a stakeholder meeting will not include discussion of CEII and/or confidential information, the Transmission Owner will provide notice to stakeholders beforehand so that the stakeholders can participate in such meeting.

§ Describe what data is confidential/CEII, the criteria to be used to identify such data, and the eligibility criteria and process for obtaining access.

Pursuant to FERC regulations, the Transmission Owner will identify as CEII specific engineering, vulnerability or detailed design information about proposed or existing critical infrastructure that:

- (i) Relates details about the production, generation, transportation, transmission, or distribution of energy;
- (ii) Could be useful to a person planning an attack on critical infrastructure;
- (iii) Is exempt from mandatory disclosure under FOIA; and
- (iv) Does not simply give the general location of the critical infrastructure.<sup>10</sup>

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<sup>10</sup> 18 C.F.R. § 388.113 (c)(1). The Transmission Owner's designation of information as potential CEII, critical asset or critical cyber asset, shall be made in good faith; however, any such determination is not binding on the Transmission Owner, and may be reversed by the Transmission Owner in the future or in other settings, as appropriate.

This definition includes, but is not limited to, the annual transmission expansion plan and all drafts thereof.

In order to participate in the transmission planning portion of the stakeholder meetings in which any CEII confidential information is discussed, or to gain access to the transmission planning links on the Transmission Owner's OASIS, which includes confidential information, the entity requesting participation follow the request procedures for CEII described above and execute a CEII Confidentiality Agreement, the form of which is attached hereto in Appendix 1.

In order to participate in the transmission planning portion of the stakeholder meetings in which any non-CEII confidential information is discussed, or to gain access to the transmission planning links on the Transmission Owner's OASIS, which includes non-CEII confidential information, the entity requesting participation must execute a non-CEII Confidentiality Agreement, the form of which is attached hereto in Appendix 1.

Additionally, pursuant to Section 6 of the confidentiality agreements, each employee, expert, agent or representative of the stakeholder who is to receive access to the confidential CEII or non-CEII information must be identified on the List of Authorized Recipients, included as Exhibit A to the appropriate confidentiality agreement. Once the appropriate confidentiality agreement is executed, the Transmission Owner will contact the participating entity regarding the digital certificates, passwords, or key encryption required to access the transmission planning portion of its OASIS.

Nothing herein shall require or obligate the Transmission Owner to release or provide access to potential CEII, critical assets or critical cyber assets-related information in a manner inconsistent with applicable law, regulation, mandatory reliability standards or prudent utility practice, as determined in the discretion of the Transmission Owner, reasonably applied.

Stakeholders that have not executed a confidentiality agreement can still participate in portions of the transmission planning portion of the stakeholder meetings that do not involve confidential information and/or CEII.

### III. Transparency

§ Describe the timelines/dates for data exchange, studies.

Under the terms of the Network Operating Agreement ("NOA"), Network Customers, including the Transmission Owner's Load Serving Entity, are required to provide by December 1 of each year, Network Resource availability forecast (e.g., all planned resource outages, including off-line and on-line dates) for the following year. The primary focus for transmission planning is contracted, long-term firm usage. The Transmission Owner invites firm Point-to-Point customers to provide information regarding their usage that will exceed five years, including information such as the Point-to-Point customer's anticipated volumes, identification

of source and sink points, and whether the customer anticipates using the system on- or off-peak. This information should also be provided on December 1 of each year.

The Transmission Owner commences its transmission expansion planning process considering any input from the SPC and the information provided by transmission customers, as described in this Part III, and a preliminary draft of the transmission expansion plan will be prepared by the Transmission Owner, and distributed to stakeholders who have executed a confidentiality agreement fifteen days prior to the fall stakeholder meeting. The Transmission Owner will take the oral comments provided by stakeholders at the fall meeting, and any other written comments provided within 30 days after the fall meeting, into account when preparing the final draft of the transmission expansion plan. The final version of the transmission expansion plan will be distributed to stakeholders fifteen days prior to the spring stakeholder meeting.

§ Timelines/dates for data exchange:

See Flowchart attached as Appendix 2.

§ Describe the transmission planning methodology and protocols used to develop transmission plans.

The planning criteria are available at: <http://www.oatiaoasis.com/LGEE/index.html> under the heading “Studies” and then “E.ON US Transmission Planning Guidelines.” See Appendix 3.

The Planning Guidelines are applied to power flow models containing all of the data collected from customers to identify overloaded elements. Potential solutions are identified, and a least cost revenue requirements analysis is then applied to select solutions to resolve these problems.

§ Describe the procedure for communicating with customers and other stakeholders regarding the basic criteria, assumptions, and data that underlie the transmission provider’s system plan.

The Transmission System Planning Guidelines are to be made available on the OASIS. These guidelines outline the basic criteria, assumptions, and data that underlie transmission planning for the Transmission System, including:

- § Adherence to NERC and SERC reliability standards;
- § Treatment of native load;
- § Transmission contingencies and measurements;
- § Thermal and voltage limits;
- § Minimum operating voltage at Generators; and
- § Modeling considerations.

These Transmission System Planning Guidelines have been designed to allow others to replicate the transmission modeling process. All of the underlying data and assumptions used in developing the transmission plan will be available on the OASIS. This information will be available to any stakeholder who has completed a confidentiality agreement. Additionally, the Transmission Owner uses GE’s PSLF (“Positive Sequence Load Flow”) software in the planning process.

§ Describe how, and when, transmission plans and other planning information will be presented to customers and other stakeholders.

See above for description of the 15 month transmission planning cycle.

§ Describe the procedure for sharing information regarding the status of upgrades identified in the transmission plan.

Via the transmission planning portion of OASIS, semi-annual updates on the status of all transmission expansion projects, including projected completion dates, will be posted. In

addition, members of the SPC will receive status reports in advance of each SPC meeting. If stakeholders have questions for the monthly meetings, they may submit such inquiries to the Manager of Transmission Strategy and Planning.

#### IV. Information Exchange

§ Describe the obligations and methods for customers to submit data to the transmission provider.

- Generators – ratings, planned additions or upgrades (including status and expected in-service date), planned retirements, and environmental restrictions.
- Demand response resources – existing and planned demand resources and their impacts on demand and peak demand.
- Network customers – forecast information for load and resource requirements over the planning horizon and identification of demand response reductions.

Under the terms of the Network Operating Agreement (“NOA”), Network Customers are required to provide by December 1 of each year, Network Resource availability forecast (e.g., all planned resource outages, including off-line and on-line dates) for the following year. Such forecasts are required to be made in accordance with Good Utility Practice. The Network Customer must inform the Transmission Owner, in a timely manner, of any changes to the Network Customer’s Network Resource availability forecast. In addition to the information required under the NOA, for the purposes of transmission planning, Network Customers will also be required to provide, on December 1 of each year, their load forecasts for the next ten years (the planning horizon). Additionally, Network Customers will also be required to update these load forecasts to the extent that they change during the year.

- Point-to-point transmission customers – projections of need for service over the planning horizon, including transmission capacity, duration, and receipt and delivery points.

The primary focus for transmission planning is contracted, long-term firm usage. The Transmission Owner invites long-term firm Point-to-Point customers to provide information regarding their usage, including information such as the Point-to-Point customer’s anticipated volumes, identification of source and sink points, and whether the customer anticipates using the system on- or off-peak. This information should also be provided on December 1 of each year.

§ Describe the schedule and procedures for submission of information by transmission customers.

Information to be used by the Transmission Owner in drafting the transmission expansion plan must be submitted by December 1 of each year. This information shall be provided to the Transmission Owner in PSLF Format or in a spreadsheet via e-mail or on CD-ROM via Federal Express to the Manager of Transmission Strategy Planning. Transmission customers should



provide the Transmission Owner with timely written notice of material changes in any information previously provided relating to its load, its resources, or other aspects of its facilities or operations affecting the transmission provider's ability to provide service.

## V. Comparability

For the purposes of transmission planning, including participation in the SPC and stakeholder meetings, all Network Customers, including the Transmission Owner's native load, and Long-Term Firm Point-to-Point Customers (*i.e.*, with a term of five years or more) will be treated comparably.

Stakeholders may propose transmission, generation and demand resources as alternative solutions to needs identified during the transmission planning process and proponents of all alternative solutions will be given equal opportunity to participate. Any entity proposing resources must complete a data sheet which will be posted on OASIS that will identify direct control load and interruptible demand. Advanced technologies and demand-side resources will be treated comparably, where appropriate in the transmission planning process, to transmission and generation solutions. Transmission plans developed under this Attachment K will be technology neutral, balancing costs, benefits and risks associated with the use of demand-side resources, transmission and generation to meet the needs of transmission customers and the Transmission Provider.

## VI. Dispute Resolution

§ Describe the process(es) that will be used to resolve planning-related disputes. Describe the issues, procedural and substantive, that will be addressed through a particular dispute resolution process.

Any dispute, claim or controversy between the Transmission Owner and a stakeholder regarding application of, or results from, these Transmission Planning Procedures, including any Transmission Owner activities undertaken pursuant to Section VII, Regional Coordination (each a "Dispute") shall be resolved in accordance with the procedures set forth in this Section VI.

1. Notice of Dispute. In the event of a Dispute under this Section VI, any party to the Dispute may provide written notice to the other parties to the Dispute, including a description of the nature of the Dispute.
2. Dispute Resolution by Representatives. The parties to the Dispute shall first refer the Dispute to their respective representatives who shall negotiate in good faith to resolve the Dispute.
3. Dispute Resolution by Executive Management Representatives. If the Dispute is not resolved within fifteen (15) days of being referred to the disputing parties' representatives

pursuant to subsection 2 of this Section VI, then each party shall have five (5) days to appoint an executive management representative who shall negotiate in good faith to resolve the Dispute.

4. **Dispute Resolution by Mediation.** If the parties' executive management representatives are unable to resolve the Dispute within thirty (30) days of their appointment, the parties shall proceed in good faith to submit the matter to a mediator mutually acceptable to the disputing parties. The parties will share equally in the cost of such mediation, which will be conducted in accordance with the Commercial Mediation Rules of the American Arbitration Association.

5. Arbitration. If the parties are unable to resolve the Dispute within thirty (30) days after the appointment of a mediator pursuant to subsection 4 of this Section VI, then the Dispute may be filed as a complaint at FERC, or may be resolved according to the provisions for arbitration and any other remedies as outlined in this subsection 5.

a. Choice of Arbitrator(s). Any arbitration initiated under subsection 5 shall be conducted before a single neutral arbitrator appointed by the disputing parties. If the disputing parties fail to agree upon a single arbitrator within ten (10) days of the referral of the Dispute to arbitration, each disputing party shall choose one arbitrator who shall sit on a three-member arbitration panel. The arbitrator(s) shall provide each of the disputing 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.

b. Arbitration Decisions. Unless otherwise agreed, the arbitrator(s) shall render a decision within ninety (90) days of appointment and shall notify the disputing parties in writing of such decision and the reasons therefore. The decision of the arbitrator(s) shall be final and binding upon the disputing parties, and judgment on the award may be entered in any court having jurisdiction; provided, to the extent the final decision of the arbitrator(s) affects jurisdictional rates, terms and conditions of service or facilities, it must also be filed with the FERC consistent with applicable law, and its effectiveness is contingent upon applicable filing and acceptance provisions of applicable law, if any. 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.

c. Costs. Each disputing party shall be responsible for its own costs incurred during the arbitration process and for the cost of the arbitrator chosen by the disputing party to sit on the three member panel or, if applicable, one third of the cost of the single arbitrator jointly chosen by the disputing parties.

6. Notwithstanding these Dispute Resolution procedures, any party to dispute retains its rights to file a complaint pursuant to Section 206 of the Federal Power Act.

7. Any procedural or substantive dispute between a stakeholder and a Southeast Inter-Regional Participation Process (“SIRPP”) Participating Transmission Owner (other than the Transmission Owner under this OATT) that arises from the SIRPP will be addressed by the Dispute Resolution measures contained in the SIRPP regional planning process, attached here to at Appendix 5.

## VII. Regional Coordination

§ Identify the entities with which the transmission provider engages in regional planning and the responsibilities of each entity in the planning process.

The Transmission Owner has joined the SIRPP announced by Southern Company in August 2007. The Transmission Owner has been, and will continue to be, an active participant in this group. The goal of the SIRPP is to complement the planning processes developed by the Participating Transmission Providers. The process will provide a means for conducting stakeholder requested Economic Planning Studies across multiple interconnected systems. The SIRPP will build on the current inter-regional, reliability planning processes required by existing multi-party reliability agreements to allow for additional participation by stakeholders. As proposed, each Participating Transmission Provider's Attachment K process will be utilized to collect data, coordinate planning assumptions, and to address stakeholder requested Economic Planning Studies internal to their respective regions. The data and assumptions developed at the regional level through the planning process described in this Attachment K (which incorporates SPC and stakeholder input) will then be consolidated and used in the development of models for use in the Inter-Regional Process. In addition to Southern Company, other entities involved in this regional planning process are Duke Energy Carolinas, Entergy, Progress Energy Carolinas, the Tennessee Valley Authority, South Carolina Electric & Gas, Santee Cooper, Alabama Electric Cooperative, Dalton Utilities, Georgia Transmission, Municipal Electric Authority of Georgia and South Mississippi Electric Power Association.

The complete SIRPP process document is attached hereto at Appendix 5.

The Transmission Owner also is involved in the TVA subregional planning process, or Central Public Power Partners group. The Transmission Owner also participates in the MISO-PJM-TVA planning process, as an interested neighboring utility. TVA is the Reliability Coordinator under this OATT, and is a signatory to the Joint Reliability Coordination Agreement ("JRCA," referenced herein at Attachment Q); TVA participates in the JRCA on its own behalf and on behalf of the Transmission Owner. In addition to this contractual relationship, the Transmission Owner participates with affected systems such as MISO, PJM, and TVA on affected system studies when new generator interconnections so require.

§ Describe the interaction between local planning and regional planning activities.

The Transmission Owner participates in the NERC Working Group annual Multi-regional Modeling ("MMWG") process through SERC. This is a bottom-up process: when projects are added to the Transmission Owner's model through the stakeholder processes outlined in this Attachment K, the information gathered through that process may be included in the MMWG plan if it meets the Working Group's criteria. There is no separate timeline for evaluating under the MMWG; once a project is added to the Transmission Owner's model, it is included in the MMWG.

Additionally, the Transmission System is interconnected with the transmission systems of East Kentucky Power Cooperative, Inc. ("EKPC"), American Electric Power subsidiaries Kentucky Power Company, Appalachian Power Company, and Ohio Power Company (collectively, "AEP"), and Duke Energy Ohio and Duke Energy Indiana (collectively, "Duke Energy"). Under the terms of the wires-to-wires interconnection agreements with each of these entities, the Transmission Owner, EKPC, AEP, and Duke Energy provide input to NERC which develops models of the eastern interconnection.

§ Describe any inter-regional planning activities in which the transmission provider or regional entity participates.

(See above).

§ Describe the process for reviewing and coordinating the results of subregional, regional and inter-regional planning activities.

(See above).

- The forms of subregional or regional planning that occur today in the transmission provider's region;

(See above).

- The modifications or improvements to such processes that are being proposed as part of compliance with Order No. 890;

(See above).

- The reasons why a particular subregion or region was chosen to address compliance with Principle No. 7;

SERC is the regional reliability organization for the Transmission Owner.

- The process by which the proposed subregional or regional planning processes can evolve over time as stakeholders gain experience with them (e.g., in undertaking additional studies as experience is gained with the initial studies; in formalizing stakeholder and state agency participation; in exchanging data, etc.).

As discussed above, the Transmission Owner supports the concept, and would be happy to participate in the proposed inter-regional SERC process recently announced, as discussed above.

As an overall matter, the regional programs described herein operate on bottom-up principles: the individual transmission-owning participants work with their stakeholders to identify problems or projects, which are then presented to the regional group as appropriate. The project or problem is then studied and/or acted upon pursuant to the regional group's standards committee using objective criteria. If a project moves forward at the regional level, costs are allocated pursuant to the regional group's cost allocation methodology (if any). For the cost allocation methodology associated with the SIRPP, see the SIRPP process document attached hereto at Appendix 5.

## VIII. Economic Planning

§ Describe the scope of economic planning undertaken by the transmission provider on behalf of its native load and OATT customers.

Currently, there is no process to consider economic projects or the economic benefits of reliability projects. However, members of the SPC will form an Economic Expansion Planning (“EP”) subcommittee, which will develop a process for considering economic projects. The EP subcommittee will be made up of members from the SPC.

Economic planning studies will be open to participation by all Transmission and Network Customers and interested parties. Economic planning studies may be used to evaluate network additions or upgrades that are not required to maintain NERC or SERC standards of reliability on the Transmission System, or to accommodate a request for transmission service, but that may alleviate significant and/or recurring congestion on some portion of the Transmission System. Economic planning studies may also be used to evaluate network additions or upgrades necessary to integrate any new resource or load on the Transmission System.

§ Describe the process by which economic planning studies can be requested and the procedures for publishing study-related information.

In January, the Transmission Owner will open a queue on the OASIS for the submission of requests for economic planning studies. Requests for economic planning studies may be submitted by Transmission Customers, Network Customers, Eligible Customers, Interconnection Customers, or other stakeholders. The queue will remain open for sixty (60) days. In March, each Transmission or Network Customer, or other member of the SPC, may nominate one person to the EP Subcommittee. The EP Subcommittee will evaluate and prioritize the requests for economic studies, including clustering any study requests. The EP Subcommittee will establish its own rules of procedure. The EP Subcommittee shall present its recommendations to the SPC at the spring stakeholder meeting. The top five (5) requests approved by the SPC shall be performed by the Transmission Owner by September 1 of each year, so that the results may be reviewed in conjunction with the transmission expansion planning process. The results will also be posted on OASIS.

As discussed below, the costs for the top five (5) requests identified by the SPC shall be included in the Transmission Owner’s transmission rates. If a customer’s request was not identified in the top five (5), then the customer may request that the Transmission Owner complete the study and assess the customer directly for the costs of the study.

The Transmission Owner shall perform the economic planning studies to the extent it has the data necessary to perform such a study. The Transmission Owner may solicit the requesting customer(s), or the Transmission Owner’s Load Serving Entity for additional information and data necessary to perform the requested economic planning study. Such information and data will be subject to confidentiality provisions, and/or Standards of Conduct, as appropriate.

The performance of an economic planning study is for evaluation purposes only. The Transmission Owner is under no obligation to build any network additions or upgrades identified by the economic planning studies.

In addition to economic planning studies that the Transmission Owner may perform for its own Transmission System, economic planning studies may also be conducted pursuant to the SIRPP. The Transmission Owner shall allocate the costs for any economic planning studies conducted as part of the SIRPP among all customers.

§ Describe the mechanism for recovering costs incurred to perform economic planning studies.

The costs for the top five (5) yearly economic planning studies performed solely for the Transmission Owner's system shall be included in the Transmission Owner's transmission rates via a line-item added to the Transmission Owner's formula rate to collect these expense items. If a customer's request was not identified in the top five (5), then the customer may request that the Transmission Owner complete the study and assess the customer directly for the costs of the study.

#### IX. Cost Allocation

The Transmission Owner has included the following cost allocation criteria for economic upgrades or additions for purposes of its Order 890 filing. Once formed, the SPC will examine the criteria to form a recommendation to the Transmission Owner on whether revised criteria should be developed (including any criteria regarding protection against "free riders"), with input from all stakeholders and interested parties including the Kentucky Public Service Commission.

The following cost allocation criteria do not apply to network upgrades or additions necessary to maintain Transmission System reliability pursuant to NERC or SERC standards, nor do they apply to network upgrades or additions identified in conjunction with a transmission service request. No upgrades described in this Section IX will be built unless the Transmission Owner has a guarantee from the customers requesting such upgrade that they will pay for the upgrade and that the Transmission Owner will not be responsible for any of the costs of the upgrade.

1. Economic Upgrades or Additions. If a network upgrade or addition is identified in an economic planning study requested by a single customer, and if such addition or upgrade is then approved for construction, then the customer requesting the upgrade shall agree to pay for the costs of the upgrade. If the customer(s) fail to agree to pay the costs identified, then the request will be deemed withdrawn.

2. Projects with Multiple Transmission Customers. For a network upgrade or addition that is requested by more than one Transmission or Network Customer, the customers requesting the upgrade shall agree as to how the costs of the upgrade shall be allocated among the customer(s) identified in the economic planning study. If the customer(s) fail to reach an agreement, the Transmission Owner shall allocate the costs of the upgrade on an equal, per capita basis to all customers requesting the upgrade.

## X. Recovery of Planning Costs

### § Describe the methodology used to recover costs associated with planning for reliability needs.

- The LG&E/KU OATT does not separately track planning-related costs; but rather, the costs of all such reliability planning is included in the rates for jurisdictional transmission services. To the extent that the Transmission Owner is required to provide economic planning, and to the extent that the Transmission Owner is permitted to recover costs for such economic planning, for studies in excess of the five annual studies identified by the EP, the Transmission Owner proposes to book such expenses in a separate transmission operating subaccount and charge these costs to all entities that sign an economic expansion study agreement. A copy of the economic planning study agreement, for those stakeholders who commission economic planning studies outside of the five identified by the EP, is attached hereto as Appendix 6.
- The Transmission Owner agrees to work with stakeholders and state agencies to determine if any other entities are in need of cost recovery for planning related activities and, if so, how those costs will be recovered.
- To the extent that a regional planning organization is formed, the Transmission Owner's costs associated with planning activities for that organization will be rolled into jurisdictional transmission rates.



**Appendix 1**

**CONFIDENTIALITY AGREEMENT  
FOR TREATMENT OF NON-CEII  
CONFIDENTIAL TRANSMISSION PLANNING  
INFORMATION**

**THIS STANDARD CONFIDENTIALITY AGREEMENT FOR TREATMENT OF NON CRITICAL INFRASTRUCTURE INFORMATION (“CEII”) CONFIDENTIAL TRANSMISSION PLANNING INFORMATION (“Agreement”)** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2007 by and between \_\_\_\_\_ (“Stakeholder”), and **E.ON U.S. SERVICES INC.**, a company organized and existing under the laws of the Commonwealth of Kentucky, acting as agent for its operating companies (in such capacity, “**E.ON**”), Louisville Gas and Electric Company, a public utility corporation organized and existing under the laws of the Commonwealth of Kentucky (“**LG&E**”), and Kentucky Utilities Company, a public utility corporation organized and existing under the laws of the Commonwealth of Kentucky (“**KU**”). Collectively, LG&E and KU may be referred to as the “Transmission Owner.” Stakeholder and Transmission Owner each may be referred to as a “Party” or collectively as the “Parties.”

**Recitals**

**WHEREAS**, Transmission Owner operates a Transmission System; and

**WHEREAS**, Stakeholder has been identified as having a legitimate interest in the Transmission Owner’s transmission planning processes, whether by virtue of being a Transmission Customer, Interconnection Customer, Eligible Customer, having a transmission interconnection with the Transmission System, or being part of the Kentucky Public Service Commission;

**WHEREAS**, the Federal Energy Regulatory Commission (“FERC” or “the Commission”) requires that transmission planning is carried out in an open and transparent manner, and that the Transmission Owner develop confidentiality procedures to ensure that information flows freely among the Parties;

**WHEREAS**, Transmission Owner and Stakeholder understand that certain Transmission Planning Information that has been designated as commercially sensitive Confidential Information, as defined in the Tariff, but not Critical Energy Infrastructure Information, as defined in 18 CFR § 388.113(c)(1), and its disclosure should be governed by a confidentiality agreement; and

**WHEREAS**, Stakeholder and Transmission Owner have agreed to enter into this Agreement for the purpose of protecting the disclosure of Confidential Transmission Planning Information.

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

### **Article 1: Purpose**

This Agreement shall govern access to the Confidential Transmission Planning Information that is not Critical Energy Infrastructure Information<sup>11</sup> conveyed to the Stakeholder by the Transmission Owner in relation to transmission planning for the Transmission System.

Unless otherwise agreed, the obligations of confidentiality and non-use set forth in this Agreement do not apply to such Transmission Planning Information that:

- (A) Was, at the time of receipt, already known to the Stakeholder, free of any obligation to keep it confidential, as evidenced by written records prepared prior to delivery by the Transmission Owner;
- (B) Is or becomes publicly known through no wrongful act of the Stakeholder;
- (C) Is rightfully received from a third person having no direct or indirect secrecy or confidentiality obligation to the Transmission Owner with respect to such information;
- (D) Is independently developed by an employee, agent, or contractor of the Stakeholder; or
- (E) Is required to be made public by the Stakeholder pursuant to Article 12 of this Agreement.

### **Article 2: Definitions**

Unless otherwise defined in Article 2 of this Agreement, capitalized terms shall have the meanings specified in the Transmission Owner's OATT.

**2.1 Transmission Planning Information.** The term "Transmission Planning Information" means the information used by the Transmission Owner in the process of transmission planning. Transmission Planning Information includes Confidential Transmission Planning Information, as well as information that may be publicly available.

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<sup>11</sup> For the purposes of this Confidentiality Agreement and Attachment K, the Transmission Owner has made a good faith effort to properly identify certain data and information as potential "Critical Energy Infrastructure Information.", critical assets or critical cyber assets. However, such determination may be reversed by the Transmission Owner in the future or in a separate forum, as appropriate.

**2.2 Confidential Transmission Planning Information.** The term “Confidential Transmission Planning Information” means the annual Transmission Expansion Plan, data used by the Transmission Owner in the process of transmission planning, the status of transmission expansion projects, or any other information provided to the Stakeholder with regard to transmission planning on the Transmission Owner’s Transmission System that is designated as “Confidential.”

**2.3 Critical Energy Infrastructure Information.** The term “Critical Energy Infrastructure Information” means only the annual Transmission Expansion Plan, data used by the Transmission Owner in the process of transmission planning, the status of transmission expansion projects, or any other information provided to the Stakeholder with regard to transmission planning on the Transmission Owner’s Transmission System that is designated as “Critical Energy Infrastructure Information.”

**2.4 Notes.** The term “Notes” means memoranda, handwritten notes, or any other form of information (including electronic form) that copies or discloses Confidential Transmission Planning Information and/or Critical Energy Infrastructure Information. Notes are subject to the same restrictions provided for in this Agreement for Confidential Transmission Planning Information and/or Critical Energy Infrastructure Information.

### **Article 3: Term and Termination**

**3.1 Term.** The term of this agreement shall commence immediately upon the signature of an officer of the Stakeholder and shall remain in effect for a period of five (5) years unless terminated sooner, with or without cause, by either Party in writing. The confidentiality and non-disclosure obligations of this Agreement shall survive this Agreement for a period of three (3) years after termination.

**3.2 Termination.** Stakeholder may terminate this Agreement at any time upon written notice of the intent to terminate, at which time Stakeholder shall be prohibited from further receipt of Confidential Transmission Planning Information and/or Critical Energy Infrastructure Information.

3.2.1 Termination does not excuse the Stakeholder or any of its employees, experts, agents or representatives receiving such information from maintaining the confidentiality of any Confidential Transmission Planning Information and/or Critical Energy Infrastructure Information received prior to termination and preventing disclosure of that Confidential Transmission Planning Information and/or Critical Energy Infrastructure Information, under the terms of this Agreement, for the term of this Agreement specified in Article 3.1.

3.2.2 Stakeholder and/or its employees, experts, agents or representatives shall destroy or return all Confidential Transmission Planning Information and/or Critical Energy Infrastructure Information to the Transmission Owner immediately upon termination of this Agreement.

#### **Article 4: Use of Confidential Transmission Planning Infrastructure Information**

All persons who may be entitled to review, or who are afforded access to Confidential Transmission Planning Information and by reason of this Agreement shall only use the Confidential Transmission Planning Information for the Stakeholder's internal purposes, including its participation in the Transmission Owner's transmission planning process, and not for the benefit or business purposes of any third party and in accordance with the purposes and intent of this Agreement.

Where references to Confidential Transmission Planning Information is required in studies, memorandum, reports, or other documents, internal or external, such references shall be by citation to the data as a whole, without reference to specific third party information and shall not disclose the substantive Confidential Transmission Planning Information contained therein.

Nothing herein shall require or obligate the Transmission Owner to release or provide access to potential CEII, critical assets or critical cyber assets-related information in a manner inconsistent with applicable law, regulation, mandatory reliability standards or prudent utility practice, as determined in the discretion of the Transmission Owner, reasonably applied.

#### **Article 5: Nondisclosure**

Confidential Transmission Planning Information shall not be disclosed to any person who is not identified in the List of Authorized Recipients, which is attached hereto as Exhibit "A" and incorporated herein.

Confidential Transmission Planning Information, including any Notes or studies produced on behalf of the Stakeholder by its employees, experts, agents or representatives, shall be treated as confidential by each Party, and shall not be disclosed in any manner to any person except another employee, expert, agent or representative who is authorized to receive the information in accordance with this Agreement.

#### **Article 6: Compliance and Protection of Confidential Transmission Planning Information**

Stakeholder represents and warrants that it has practices and procedures adequate to protect against the unauthorized release of the Confidential Transmission Planning Information received. Stakeholder must educate its employees, experts, agents, or representatives in the provisions of this Agreement and provide to the Transmission Owner upon request any information necessary to determine compliance with the terms of this Agreement.

## **Article 7: Persons Entitled to Review**

**7.1 Qualifications.** Access to Confidential Transmission Planning Information shall be limited to those employees, experts, agents or representatives necessary to participate in the Transmission Owner's transmission planning process, including those who perform an analysis of the Transmission Owner's transmission planning.

In the event that any employee, expert, agent or representative to whom the Confidential Transmission Planning Information has been disclosed ceases to be affiliated with the Stakeholder, or is employed or retained for a position that would disqualify that individual pursuant to this Article, the Stakeholder shall terminate that individual's access to Confidential Transmission Planning Information and either destroy all Notes prepared by that employee, expert, agent or representative or return those Notes to the Transmission Owner. The employee, expert, agent or representative shall fulfill their obligations under this Agreement for the remainder of the term of the Agreement as defined in Article 3.

**7.2 Designation of Employees, Experts, Agents or Representatives.** Concurrent with the execution of this Agreement, Stakeholder shall designate the employees, experts, agents or representatives to receive the Confidential Transmission Planning Information by providing the completed List of Authorized Recipients, attached hereto as Exhibit A. Stakeholder shall provide to the Transmission Owner the name, position/title, business address, phone number, email address, and primary responsibilities for each designated employee, expert, agent or representative. Stakeholder may submit requests for approval of additional employees, experts, agents or representatives to receive Confidential Transmission Planning Information to the Transmission Owner as required. Exhibit A shall be updated (including, and especially reflecting, the deletions of names of individuals no longer employed by the company, or that no longer require or qualify to have access to the Confidential Transmission Planning Information) and resubmitted to the Transmission Owner promptly to reflect the current and accurate listing of those individuals within the company that have been designated by the Stakeholder and approved by the Transmission Owner.

**7.3 Approval.** Transmission Owner must approve the disclosure of Confidential Transmission Planning Information to each designated employee, expert, agent or representative of the Stakeholder, such approval not to be unreasonably withheld. Stakeholder shall not disclose Confidential Transmission Planning Information to any additional employees, experts, agents or representatives of Stakeholder, unless and until Transmission Owner approves the

disclosure and the designated employee, expert, agent or representative is identified on the List of Authorized Recipients.

**7.4 Internal Disclosure.** An employee, expert, agent or representative may disclose Confidential Transmission Planning Information to another employee, expert, agent or representative as long as the disclosing

employee, expert, agent or representative and the receiving employee, expert, agent or representative are both identified on the List of Authorized Recipients.

#### **Article 8: Treatment of Confidential Material**

Confidential Transmission Planning Information shall be clearly marked and protected from unauthorized public disclosure and disclosure to unauthorized employees, experts, agents or representatives of the Stakeholder.

#### **Article 9: Copies**

No copies or transcriptions of the Confidential Transmission Planning Information shall be made by the Stakeholder except as necessary to make the information available to authorized individuals.

#### **Article 10: Return of Confidential Transmission Planning Information**

**10.1 General.** Upon request of Transmission Owner, all original documents and copies of the Confidential Transmission Planning Information shall be: 1) returned to Transmission Owner, or 2) destroyed by the holder of such documents.

**10.2 Return of Notes.** Any Notes maintained by a recipient of Confidential Transmission Planning Information which embody or reflect any of the Confidential Transmission Planning Information provided under this Agreement shall, upon request of Transmission Owner, be either returned to Transmission Owner or, at the option of the recipient, destroyed.

#### **Article 11: Accuracy of Information**

Stakeholder acknowledges that neither Transmission Owner, nor any of Transmission Owner's agents, employees, or other representatives (including but not limited to the Reliability Coordinator), are making any representation or warranty as to the accuracy or completeness of any information furnished to Stakeholder. Neither Transmission Owner nor any of its officers,

directors, employees, agents or controlling persons (including, without limitation, parent and subsidiary companies) shall have any liability to Stakeholder, or to any of Stakeholder's agents or other representatives, or any other person, relating to or arising from the use of information provided to Stakeholder by Transmission Owner.

#### **Article 12: Compelled Disclosure.**

In the event that Stakeholder becomes legally compelled (by deposition, interrogatory, request for documents, subpoena, civil investigative demand or similar process, or applicable law or regulation) to disclose any Confidential Transmission Planning Information, the Stakeholder shall give the Transmission Owner prompt

written notice of such requirement prior to releasing such information so that the Transmission Owner may seek a protective order or other appropriate remedy and/or waive compliance with the terms of this Agreement. The Stakeholder shall cooperate with the Transmission Owner to obtain a protective order. In the event that such protective order or other remedy is not obtained, or that the Transmission Owner waives compliance with the terms hereof, the Stakeholder agrees to provide only that limited portion of the Confidential Transmission Planning Information that it is advised by written opinion of counsel is legally required and to exercise best efforts to obtain assurance that confidential treatment will be accorded such information. Upon request of the Transmission Owner, the Stakeholder shall provide such opinion of counsel to the Transmission Owner. Disclosure of Confidential Transmission Planning Information by the Transmission Owner to regulatory bodies having jurisdiction over the Transmission Owner will not terminate the confidentiality of the Confidential Transmission Planning Information, provided that the Transmission Owner submits the Confidential Transmission Planning Information under an appropriate protective order or agreement.

#### **Article 13: Remedies**

Each Party acknowledges that any disclosure or misappropriation of Confidential Transmission Planning Information by the Stakeholder in violation of this Agreement could cause the Transmission Owner irreparable harm, the amount of which may be extremely difficult to estimate, thus making any remedy at law or in damages inadequate. Therefore, the Stakeholder agrees that the Transmission Owner shall have the right to apply to any court of competent jurisdiction for a restraining order or an injunction restraining or enjoining any breach or threatened breach of this Agreement and for any other equitable relief that the Transmission Owner deems appropriate. This right shall be in addition to any other remedy available to the Parties in law or equity. Stakeholder shall be liable for and shall pay Transmission Owner for any court costs and reasonable attorney's fees incurred in obtaining this and any other remedy under this Agreement.

#### **Article 14: Indemnification**

Stakeholder shall indemnify Transmission Owner for any liability to third-parties resulting from the unauthorized disclosure of the Confidential Transmission Planning

Information subject to this Agreement by Stakeholder or Stakeholder's employees, experts, agents or representatives to any individual that is not authorized under this Agreement to receive the information. Stakeholder's indemnification of Transmission Owner includes compensation to Transmission Owner for all of Transmission Owner's attorney's fees.

### **Article 15: Contact Information**

Stakeholder shall send its executed Confidentiality Agreement, including Exhibit A and any amended Exhibit A, and all correspondence related to this Confidentiality Agreement to:

E.ON U.S. Services, Inc.  
Attn: \_\_\_\_\_  
220 West Main Street  
Louisville, KY

The Transmission Owner may, upon notice to Stakeholder, update its contact information at any time during this Agreement.

### **Article 16: Assignment**

This Agreement may only be assigned by a Party with the written consent of the non-assigning Party, which consent shall be at the sole discretion of the non-assigning Party.

### **Article 17: Amendments**

No amendment, modification, and/or discharge of this Agreement, other than that identified in Article 15, shall be valid or binding on the Parties unless made in writing and signed on behalf of each of the Parties by their respective duly authorized officers or representatives.

### **Article 18: Miscellaneous Provisions**

- 18.1 Nothing contained in this Agreement shall require either Party, or the Parties collectively, to commence, continue, or conclude discussions or negotiations or require the execution of any documents or agreements, which action or inaction shall be at the sole discretion of each Party, respectively.
- 18.2 No Party shall issue any press release or make any public statement of any kind that discussions or negotiations are taking place concerning or related to this Agreement without the prior written consent of the other Party, which consent shall be at the sole discretion of said other Party.



- 18.3 This Agreement constitutes the entire understanding and agreement between the Parties hereto with respect to the subject matter hereof and supersedes all previous communications, representations, and understandings, both oral and written, between the Parties with respect to the subject matter of this Agreement.
- 18.4 Nothing herein shall constitute, or be interpreted as creating or constituting any partnership, joint venture or agency relationship between the Parties.
- 18.5 The validity, interpretation and performance of this Agreement and each of its provisions shall be governed by the laws of the Commonwealth of Kentucky.
- 18.6 If any provision in this Agreement 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 Agreement.
- 18.7 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. 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. Any waiver of this Agreement shall, if requested, be provided in writing.
- 18.8 The descriptive headings of the various Articles of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.

**ACCEPTED AND AGREED TO BY:**

**Stakeholder**

**E.ON U.S. Services, Inc.**

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

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

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

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

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

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

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

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

## EXHIBIT A

### List of Authorized Recipients

Stakeholder ( \_\_\_\_\_ ), its employees, experts, agents, representatives, subject to the Confidentiality Agreement, as of this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_:

Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Primary Responsibilities: \_\_\_\_\_

Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Primary Responsibilities: \_\_\_\_\_

Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Primary Responsibilities: \_\_\_\_\_

Print Name: \_\_\_\_\_  
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Email Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Primary Responsibilities: \_\_\_\_\_

Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Primary Responsibilities: \_\_\_\_\_

(Attach Additional Pages If Necessary)

# **CONFIDENTIALITY AGREEMENT FOR TREATMENT OF CEII CONFIDENTIAL TRANSMISSION PLANNING INFORMATION**

**THIS STANDARD CONFIDENTIALITY AGREEMENT FOR TREATMENT OF CRITICAL INFRASTRUCTURE INFORMATION (“CEII”) CONFIDENTIAL TRANSMISSION PLANNING INFORMATION (“Agreement”)** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2007 by and between \_\_\_\_\_ (“Stakeholder”), and **E.ON U.S. SERVICES INC.**, a company organized and existing under the laws of the Commonwealth of Kentucky, acting as agent for its operating companies (in such capacity, “**E.ON**”), Louisville Gas and Electric Company, a public utility corporation organized and existing under the laws of the Commonwealth of Kentucky (“**LG&E**”), and Kentucky Utilities Company, a public utility corporation organized and existing under the laws of the Commonwealth of Kentucky (“**KU**”). Collectively, LG&E and KU may be referred to as the “Transmission Owner.” Stakeholder and Transmission Owner each may be referred to as a “Party” or collectively as the “Parties.”

## **Recitals**

**WHEREAS**, Transmission Owner operates a Transmission System; and

**WHEREAS**, Stakeholder has been identified as having a legitimate interest in the Transmission Owner’s transmission planning processes, whether by virtue of being a Transmission Customer, Interconnection Customer, Eligible Customer, having a transmission interconnection with the Transmission System, or being part of the Kentucky Public Service Commission;

**WHEREAS**, the Federal Energy Regulatory Commission (“FERC” or “the Commission”) requires that transmission planning is carried out in an open and transparent manner, and that the Transmission Owner develop confidentiality procedures to ensure that information flows freely among the Parties;

**WHEREAS**, Transmission Owner and Stakeholder understand that certain Transmission Planning Information that has been designated as commercially sensitive Critical Energy Infrastructure Information (“CEII”), as defined in 18 CFR § 388.113(c)(1), and its disclosure should be governed by a confidentiality agreement; and

**WHEREAS**, Stakeholder and Transmission Owner have agreed to enter into this Agreement for the purpose of protecting the disclosure of Confidential CEII Transmission Planning Information.

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

## Article 1: Purpose

This Agreement shall govern access to Critical Energy Infrastructure Information<sup>12</sup> conveyed to the Stakeholder by the Transmission Owner in relation to transmission planning for the Transmission System.

Unless otherwise agreed, the obligations of confidentiality and non-use set forth in this Agreement do not apply to such Transmission Planning Information that:

- (A) Was, at the time of receipt, already known to the Stakeholder, free of any obligation to keep it confidential, as evidenced by written records prepared prior to delivery by the Transmission Owner;
- (B) Is or becomes publicly known through no wrongful act of the Stakeholder;
- (C) Is rightfully received from a third person having no direct or indirect secrecy or confidentiality obligation to the Transmission Owner with respect to such information;
- (D) Is independently developed by an employee, agent, or contractor of the Stakeholder; or
- (E) Is required to be made public by the Stakeholder pursuant to Article 12 of this Agreement.

## Article 2: Definitions

Unless otherwise defined in Article 2 of this Agreement, capitalized terms shall have the meanings specified in the Transmission Owner's OATT.

**2.1 Transmission Planning Information.** The term "Transmission Planning Information" means the information used by the Transmission Owner in the process of transmission planning. Transmission Planning Information includes Confidential Transmission Planning Information, as well as information that may be publicly available.

**2.2 Confidential Transmission Planning Information.** The term "Confidential Transmission Planning Information" means the annual Transmission Expansion Plan, Transmission Planning Guidelines and Criteria, data used by the Transmission Owner in the process of transmission planning, the status of transmission expansion projects, or any other information provided to the Stakeholder with regard to transmission planning on the Transmission Owner's Transmission System that is designated as "Confidential."

**2.3 Critical Energy Infrastructure Information.** The term "Critical Energy Infrastructure Information" means only the annual Transmission Expansion Plan, data used by the Transmission Owner in the process of transmission planning, the status of transmission

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<sup>12</sup> For the purposes of this Confidentiality Agreement and Attachment K, the Transmission Owner has made a good faith effort to properly identify certain data and information as potential "Critical Energy Infrastructure Information.", critical assets or critical cyber assets. However, such determination may be reversed by the Transmission Owner in the future or in a separate forum, as appropriate.

expansion projects, or any other information provided to the Stakeholder with regard to transmission planning on the Transmission Owner's Transmission System that is designated as "Critical Energy Infrastructure Information."

**2.4 Notes.** The term "Notes" means memoranda, handwritten notes, or any other form of information (including electronic form) that copies or discloses Confidential Critical Energy Infrastructure Information. Notes are subject to the same restrictions provided for in this Agreement for Confidential Critical Energy Infrastructure Information.

### **Article 3: Term and Termination**

**3.1 Term.** The term of this agreement shall commence immediately upon the signature of an officer of the Stakeholder and shall remain in effect for a period of five (5) years unless terminated sooner, with or without cause, by either Party in writing. The confidentiality and non-disclosure obligations of this Agreement shall survive this Agreement for a period of three (3) years after termination.

**3.2 Termination.** Stakeholder may terminate this Agreement at any time upon written notice of the intent to terminate, at which time Stakeholder shall be prohibited from further receipt of Confidential Critical Energy Infrastructure Information.

3.2.1 Termination does not excuse the Stakeholder or any of its employees, experts, agents or representatives receiving such information from maintaining the confidentiality of any Confidential Critical Energy Infrastructure Information received prior to termination and preventing disclosure of that Confidential Critical Energy Infrastructure Information, under the terms of this Agreement, for the term of this Agreement specified in Article 3.1.

3.2.2 Stakeholder and/or its employees, experts, agents or representatives shall destroy or return all Confidential Critical Energy Infrastructure Information to the Transmission Owner immediately upon termination of this Agreement.

### **Article 4: Use of Confidential Critical Energy Infrastructure Information**

All persons who may be entitled to review, or who are afforded access to Confidential Critical Energy Infrastructure Information by reason of this Agreement shall only use the Confidential Critical Energy Infrastructure Information for the Stakeholder's internal purposes, including its participation in the Transmission Owner's transmission planning process, and not for the benefit or business purposes of any third party and in accordance with the purposes and intent of this Agreement.

Where references to Confidential Critical Energy Infrastructure Information is required in studies, memorandum, reports, or other documents, internal or external, such references shall be by citation to the data as a whole, without reference to specific third party information and shall not disclose the substantive Confidential Critical Energy Infrastructure Information contained therein.

Nothing herein shall require or obligate the Transmission Owner to release or provide access to potential CEII, critical assets or critical cyber assets-related information in a manner inconsistent with applicable law, regulation, mandatory reliability standards or prudent utility practice, as determined in the discretion of the Transmission Owner, reasonably applied.

#### **Article 5: Nondisclosure**

Confidential Critical Energy Infrastructure Information shall not be disclosed to any person who is not identified in the List of Authorized Recipients, which is attached hereto as Exhibit "A" and incorporated herein.

Confidential Critical Energy Infrastructure Information, including any Notes or studies produced on behalf of the Stakeholder by its employees, experts, agents or representatives, shall be treated as confidential by each Party, and shall not be disclosed in any manner to any person except another employee, expert, agent or representative who is authorized to receive the information in accordance with this Agreement.

#### **Article 6: Compliance and Protection of Confidential Critical Energy Infrastructure Information**

Stakeholder represents and warrants that it has practices and procedures adequate to protect against the unauthorized release of the Confidential Critical Energy Infrastructure Information received. Stakeholder must educate its employees, experts, agents, or representatives in the provisions of this Agreement and provide to the Transmission Owner upon request any information necessary to determine compliance with the terms of this Agreement.

#### **Article 7: Persons Entitled to Review**

**7.1 Qualifications.** Access to Confidential Critical Energy Infrastructure Information shall be limited to those employees, experts, agents or representatives necessary to participate in the Transmission Owner's transmission planning process, including those who perform an analysis of the Transmission Owner's transmission planning.

In the event that any employee, expert, agent or representative to whom the Confidential Critical Energy Infrastructure Information has been disclosed ceases to be affiliated with the Stakeholder, or is employed or retained for a position that would disqualify that individual pursuant to this Article, the Stakeholder shall terminate that individual's access to Confidential

Critical Energy Infrastructure Information and either destroy all Notes prepared by that employee, expert, agent or representative or return those Notes to the Transmission Owner. The employee, expert, agent or representative shall fulfill their obligations under this Agreement for the remainder of the term of the Agreement as defined in Article 3.

**7.2 Designation of Employees, Experts, Agents or Representatives.** Concurrent with the execution of this Agreement, Stakeholder shall designate the employees, experts, agents or representatives to receive the Confidential Critical Energy Infrastructure Information by providing the completed List of Authorized Recipients, attached hereto as Exhibit A. Stakeholder shall provide to the Transmission Owner the name, position/title, business address, phone number, email address, and primary responsibilities for each designated employee, expert, agent or representative. Stakeholder may submit requests for approval of additional employees, experts, agents or representatives to receive Confidential Critical Energy Infrastructure Information to the Transmission Owner as required. Exhibit A shall be updated (including, and especially reflecting, the deletions of names of individuals no longer employed by the company, or that no longer require or qualify to have access to the Confidential Critical Energy Infrastructure Information) and resubmitted to the Transmission Owner promptly to reflect the current and accurate listing of those individuals within the company that have been designated by the Stakeholder and approved by the Transmission Owner.

**7.3 Approval.** Transmission Owner must approve the disclosure of Confidential Critical Energy Infrastructure Information to each designated employee, expert, agent or representative of the Stakeholder, such approval not to be unreasonably withheld. Stakeholder shall not disclose Confidential Critical Energy Infrastructure Information to any additional employees, experts, agents or representatives of Stakeholder, unless and until Transmission Owner approves the disclosure and the designated employee, expert, agent or representative is identified on the List of Authorized Recipients.

**7.4 Internal Disclosure.** An employee, expert, agent or representative may disclose Confidential Critical Energy Infrastructure Information to another employee, expert, agent or representative as long as the disclosing employee, expert, agent or representative and the receiving employee, expert, agent or representative are both identified on the List of Authorized Recipients.

## **Article 8: Treatment of Confidential Material**

Confidential Critical Energy Infrastructure Information shall be clearly marked and protected from unauthorized public disclosure and disclosure to unauthorized employees, experts, agents or representatives of the Stakeholder.

## **Article 9: Copies**

No copies or transcriptions of the Confidential Critical Energy Infrastructure Information shall be made by the Stakeholder except as necessary to make the information available to authorized individuals.

## **Article 10: Return of Confidential Critical Energy Infrastructure Information**

**10.1 General.** Upon request of Transmission Owner, all original documents and copies of the Confidential Critical Energy Infrastructure Information shall be: 1) returned to Transmission Owner, or 2) destroyed by the holder of such documents.

**10.2 Return of Notes.** Any Notes maintained by a recipient of Confidential Critical Energy Infrastructure Information which embody or reflect any of the Confidential Transmission Planning Information provided under this Agreement shall, upon request of Transmission Owner, be either returned to Transmission Owner or, at the option of the recipient, destroyed.

## **Article 11: Accuracy of Information**

Stakeholder acknowledges that neither Transmission Owner, nor any of Transmission Owner's agents, employees, or other representatives (including but not limited to the Reliability Coordinator), are making any representation or warranty as to the accuracy or completeness of any information furnished to Stakeholder. Neither Transmission Owner nor any of its officers, directors, employees, agents or controlling persons (including, without limitation, parent and subsidiary companies) shall have any liability to Stakeholder, or to any of Stakeholder's agents or other representatives, or any other person, relating to or arising from the use of information provided to Stakeholder by Transmission Owner.

## **Article 12: Compelled Disclosure.**

In the event that Stakeholder becomes legally compelled (by deposition, interrogatory, request for documents, subpoena, civil investigative demand or similar process, or applicable law or regulation) to disclose any Confidential Critical Energy Infrastructure Information, the Stakeholder shall give the Transmission Owner prompt written notice of such requirement prior to releasing such information so that the Transmission Owner may seek a protective order or other appropriate remedy and/or waive compliance with the terms of this Agreement. The Stakeholder shall cooperate with the Transmission Owner to obtain a protective order. In the event that such protective order or other remedy is not obtained, or that the Transmission Owner waives compliance with the terms hereof, the Stakeholder agrees to provide only that limited portion of the Confidential Critical Energy Infrastructure Information that it is advised by written opinion of counsel is legally required and to exercise best efforts to obtain assurance that confidential treatment will be accorded such information. Upon request of the Transmission Owner, the Stakeholder shall provide such opinion of counsel to the Transmission Owner. Disclosure of Confidential Critical Energy Infrastructure Information by the Transmission Owner to regulatory bodies having jurisdiction over the Transmission Owner will not terminate the confidentiality of the Confidential Critical Energy Infrastructure Information, provided that the Transmission Owner submits the Confidential Critical Energy Infrastructure Information under an appropriate protective order or agreement.

## **Article 13: Remedies**



Each Party acknowledges that any disclosure or misappropriation of Confidential Critical Energy Infrastructure Information by the Stakeholder in violation of this Agreement could cause the Transmission Owner irreparable harm, the amount of which may be extremely difficult to estimate, thus making any remedy at law or in damages inadequate. Therefore, the Stakeholder agrees that the Transmission Owner shall have the right to apply to any court of competent jurisdiction for a restraining order or an injunction restraining or enjoining any breach or threatened breach of this Agreement and for any other equitable relief that the Transmission Owner deems appropriate. This right shall be in addition to any other remedy available to the Parties in law or equity. Stakeholder shall be liable for and shall pay Transmission Owner for any court costs and reasonable attorney's fees incurred in obtaining this and any other remedy under this Agreement.

#### **Article 14: Indemnification**

Stakeholder shall indemnify Transmission Owner for any liability to third-parties resulting from the unauthorized disclosure of the Confidential CEII Transmission Planning Information and other Confidential Transmission Planning Information subject to this Agreement by Stakeholder or Stakeholder's employees, experts, agents or representatives to any individual that is not authorized under this Agreement to receive the information. Stakeholder's indemnification of Transmission Owner includes compensation to Transmission Owner for all of Transmission Owner's attorney's fees.

#### **Article 15: Contact Information**

Stakeholder shall send its executed Confidentiality Agreement, including Exhibit A and any amended Exhibit A, and all correspondence related to this Confidentiality Agreement to:

E.ON U.S. Services, Inc.  
Attn: \_\_\_\_\_  
220 West Main Street  
Louisville, KY

The Transmission Owner may, upon notice to Stakeholder, update its contact information at any time during this Agreement.

#### **Article 16: Assignment**

This Agreement may only be assigned by a Party with the written consent of the non-assigning Party, which consent shall be at the sole discretion of the non-assigning Party.

#### **Article 17: Amendments**

No amendment, modification, and/or discharge of this Agreement, other than that identified in Article 15, shall be valid or binding on the Parties unless made in writing and signed on behalf of each of the Parties by their respective duly authorized officers or representatives.

## **Article 18: Miscellaneous Provisions**

- 18.1 Nothing contained in this Agreement shall require either Party, or the Parties collectively, to commence, continue, or conclude discussions or negotiations or require the execution of any documents or agreements, which action or inaction shall be at the sole discretion of each Party, respectively.
- 18.2 No Party shall issue any press release or make any public statement of any kind that discussions or negotiations are taking place concerning or related to this Agreement without the prior written consent of the other Party, which consent shall be at the sole discretion of said other Party.
- 18.3 This Agreement constitutes the entire understanding and agreement between the Parties hereto with respect to the subject matter hereof and supersedes all previous communications, representations, and understandings, both oral and written, between the Parties with respect to the subject matter of this Agreement.
- 18.4 Nothing herein shall constitute, or be interpreted as creating or constituting any partnership, joint venture or agency relationship between the Parties.
- 18.5 The validity, interpretation and performance of this Agreement and each of its provisions shall be governed by the laws of the Commonwealth of Kentucky.
- 18.6 If any provision in this Agreement 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 Agreement.
- 18.7 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. 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. Any waiver of this Agreement shall, if requested, be provided in writing.
- 18.8 The descriptive headings of the various Articles of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.

ACCEPTED AND AGREED TO BY:

**Stakeholder**

**E.ON U.S. Services, Inc.**

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

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

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

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

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

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

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

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

## EXHIBIT A

### List of Authorized Recipients

Stakeholder ( \_\_\_\_\_ ), its employees, experts, agents, representatives, subject to the Confidentiality Agreement, as of this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_:

Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Primary Responsibilities: \_\_\_\_\_

Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Primary Responsibilities: \_\_\_\_\_

Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Primary Responsibilities: \_\_\_\_\_

Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Primary Responsibilities: \_\_\_\_\_

Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Primary Responsibilities: \_\_\_\_\_

## **Appendix 2**

**Note: Appendix 2 is a 2 page pdf of the Transmission Planning Cycle**

### **Appendix 3**

#### **Transmission System Planning Guidelines**

As of June 24, 2009, the current version of the Transmission System Planning Guidelines,  
is available at:

<http://www.oatiaoasis.com/LGEE/index.html>

# Critical Energy Infrastructure Information Request Form

## REQUEST FOR CEII:

Description of information requested: \_\_\_\_\_

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Statement explaining need and intended use of the information:

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## REQUESTOR INFORMATION:

Requester's Name and Title: \_\_\_\_\_

Any other names, *e.g.*, maiden name, used by requester and dates used:

Name

Date used

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Requester's Address: \_\_\_\_\_

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Requester's Phone: \_\_\_\_\_

**[Request form continued on next page]**

## EMPLOYER/CLIENT INFORMATION

Name, address and primary telephone number of Requestor's organization or employer:

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Name, address and primary telephone number of entity on whose behalf Requestor is acting  
(*e.g.*, as agent or consultant):

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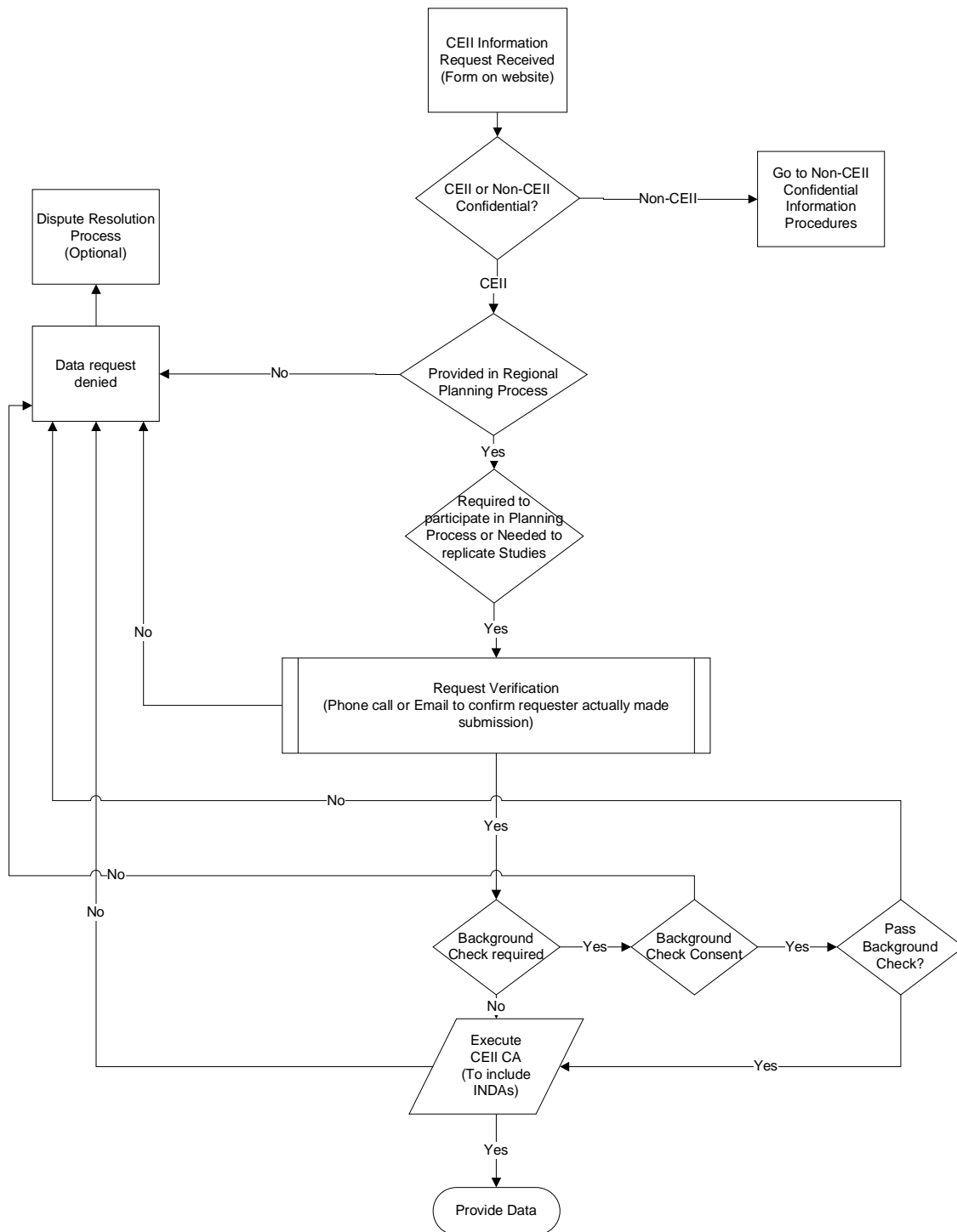
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Business Reference(s):	
Name: _____	Phone #: _____
Name: _____	Phone #: _____



# CEII Certification Procedure



## Consent to Release Information for Background Investigation

*To be completed by CEII Requestor and returned to the SIRPP CEII Coordinator*

### PERTAINING TO REQUESTOR'S REQUEST TO RECEIVE CEII

<b>Requestor (Your Full Name)</b>	<b>Organization/Employer</b>
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I (on behalf of myself and as a duly authorized representative of my organization/employer) ("I" or "Requestor"), the undersigned, a stakeholder in Stakeholder Planning Committee ("SPC"), have requested access to critical energy infrastructure information ("CEII"), as defined by the regulations of the Federal Energy Regulatory Commission ("FERC") (*see* 18 C.F.R. § 388.113), in order to facilitate my participation in the SPC and to replicate SPC transmission planning studies.

In consideration of my being considered eligible to receive any CEII that is likely to be discussed, distributed and/or referenced pertaining to the SPC, and to assist the SPC<sup>13</sup> in protecting CEII, I hereby willingly and voluntarily consent to a background investigation(s) and to the release of all information necessary for and/or pertaining to my background investigation(s) (including the results thereof) to the SPC, to authorized representatives of the SPC and/or to governmental authorities, as appropriate. In addition, I hereby authorize the SPC and their authorized representatives to procure reports about me (including, but not limited to, Social Security verification, citizenship/visa/green card verification, criminal records and employment verification) from any consumer reporting agency or governmental entity. I further acknowledge and understand that I have a right to request certain information from any consumer reporting agency which provides a report to the SPC, and that I have a right to dispute inaccurate information with the consumer reporting agency.

I hereby release the SPC and their affiliates, agents, officials, representatives, and/or assigned agencies, including officers, employees, and/or related personnel, both individually and collectively, from any and all liability for damages of whatever kind that may at any time be incurred by me, my organization/employer, my heirs, family or associates as a result of my consent to background investigation(s), the use and/or disclosure of my information in any background investigation(s), and/or the disclosure of the results of such investigation(s).

Requestor's Signature

Date

\_\_\_\_\_

\_\_\_\_\_

Social Security Number

Date and Place of Birth

\_\_\_\_\_

\_\_\_\_\_

Home Mailing Address:

Full Legal Name and Address of  
Organization/Employer

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Driver's License No. and State Issued

Print or Type All Former Names Used (Including Date of Use):

(1) \_\_\_\_\_

(2) \_\_\_\_\_

Previous Residence (7-year history): Address(es), City(ies), State(s) and Country(ies):

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

List any convictions or pending charges for offenses against the law (other than minor traffic violations), including the charge, date and arresting location:

(1) \_\_\_\_\_

(2) \_\_\_\_\_

**[If necessary, please use additional sheets to provide additional responses to the questions above.]**

## Appendix 5 – SIRPP

### **Southeast Inter-Regional Participation Process**

#### **Introduction:**

In an effort to more fully address the regional participation principle outlined in the Order 890 Attachment K Tariff requirements and the related guidance contained in the FERC Transmission Planning Process Staff White Paper (dated August 2, 2007), this Southeast Inter-Regional Participation Process expands upon the existing processes for regional planning in the Southeast. This document outlines an inter-regional process among various Southeastern interconnected transmission owners. The inter-regional process described herein is incorporated into each Participating Transmission Owner's<sup>14</sup> planning process and OATT Attachment K (for those transmission owners that have a regulatory requirement to file an Attachment K).

#### **Purpose:**

This inter-regional process complements the regional planning processes developed by the Participating Transmission Owners in the Southeast. For the purpose of this document, the term "Southeast Inter-Regional Participation Process" ("SIRPP") is defined as a new process to more fully address the regional participation principle of Order 890 for multiple transmission systems in the Southeast. The term "Regional Planning Processes" refers to the regional transmission planning processes a Transmission Owner has established within its particular region for Attachment K purposes. Importantly, the Economic Planning Studies discussed herein are hypothetical studies that do not affect the transmission queue for purposes of System Impact Studies, Facilities Studies, or interconnection studies performed under other portions of the OATT.

#### **Current Inter-Regional Planning Process:**

Each Southeastern transmission owner currently develops a transmission plan to account for service to its native load and other firm transmission service commitments on its transmission system. This plan development is the responsibility of each transmission planner individually and does not directly involve the Regional Reliability Organization (*e.g.* SERC). Once developed, the Participating Transmission Owners collectively conduct inter-regional reliability transmission assessments, which include the sharing of the individual transmission system plans, providing information on the assumptions and data inputs used in the development of those plans and assessing whether the plans are simultaneously feasible.

#### **Participating Transmission Owners:**

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<sup>14</sup> The sponsors of the Southeast Inter-Regional Participation Process are referred to as transmission owners, rather than transmission providers, because not all of the sponsors are "Transmission Providers" for purposes of the *pro forma* OATT.

Due to the additional regional planning coordination principles that have been announced in Order 890 and the associated Transmission Planning White Paper, several transmission owners have agreed to provide additional transmission planning coordination, as further described in this document. The “Participating Transmission Owners” are listed on the SIRPP website (<http://www.southeastirpp.com>).

### **Southeast Inter-Regional Participation Process:**

The Southeast Inter-Regional Participation Process is outlined in the attached diagram. As shown in that diagram, this process will provide a means for conducting stakeholder requested Economic Planning Studies across multiple interconnected systems. In addition, this process will build on the current inter-regional, reliability planning processes required by existing multi-party reliability agreements to allow for additional participation by stakeholders.

The established Regional Planning Processes outlined in the Participating Transmission Owners’ Attachment Ks will be utilized for collecting data, coordinating planning assumptions, and addressing stakeholder requested Economic Planning Studies internal to their respective regions. The data and assumptions developed at the regional level will then be consolidated and used in the development of models for use in the Inter-Regional Participation Process. This will ensure consistency in the planning data and assumptions used in local, regional, and inter-regional planning processes.

These established Attachment K processes may also serve as a mechanism to collect requests for inter-regional Economic Planning Studies by a participant’s stakeholders group. The Economic Planning Studies requested through each participant’s Attachment K process that involve impacts on multiple systems between Regional Planning Processes will be consolidated and evaluated as part of the Southeast Inter-Regional Participation Process. Stakeholders will also be provided the opportunity to submit their requests for inter-regional Economic Planning Studies directly to the Inter-Regional process.

The Participating Transmission Owners recognize the importance of coordination with neighboring (external) planning processes. Therefore, seams coordination will take place at the regional level where external regional planning processes adjoin the Southeast Inter-Regional Participation Process (*e.g.* Southeastern Regional Planning Process coordinating with FRCC Regional Planning Process, Entergy coordinating with SPP, TVA coordinating with MISO and PJM, and the North Carolina Transmission Planning Collaborative coordinating with PJM). External coordination is intended to include planning assumptions from neighboring processes and the coordination of transmission enhancements and stakeholder requested Economic Planning Studies to support the development of simultaneously feasible transmission plans both internal and external to the Southeast Inter-Regional Participation Process.

With regard to the development of the stakeholder requested inter-regional Economic Planning Studies, the Participating Transmission Owners will each provide staff (transmission planners) to

serve on the study coordination team. The study coordination team will lead the development of study assumptions (and coordinate with stakeholders, as discussed further below), perform model development, and perform any other coordination efforts with stakeholders and impacted external planning processes. During the study process, the study coordination team will also be responsible for performing analysis, developing solution options, evaluating stakeholder suggested solution options, and developing a report(s) once the study(ies) is completed. Once the study(ies) is completed, the study coordination team will distribute the report(s) to all Participating Transmission Owners and the stakeholders.

With regard to coordinating with stakeholders in the development of the inter-regional Economic Planning Study(ies), in each cycle of the Southeast Inter-Regional Participation Process, the Participating Transmission Owners will conduct three inter-regional stakeholder meetings. The information to be discussed at such meetings will be made available in final draft form for stakeholder review prior to any such meeting by posting on the SIRPP website and/or e-mails to SIRPP Stakeholder Group (“SIRPPSG”) members. The Participating Transmission Owners will use reasonable efforts to make such information available at least 10 calendar days prior to the particular meeting. The Participating Transmission Owners will conduct the “1<sup>st</sup> Inter-Regional Stakeholder Meeting”, as shown in the attached diagram. At this meeting, a review of all of the Economic Planning Study(ies) submitted through the participants’ Regional Planning Processes or directly to the Inter-Regional process, along with any additional Economic Planning Study requests that are submitted at this 1<sup>st</sup> meeting, will be conducted. During this meeting, the stakeholders will select up to five studies that will be evaluated within the planning cycle. The study coordination team will coordinate with the stakeholders regarding the study assumptions underlying the identified stakeholder requested inter-regional Economic Planning Study(ies). Through this process, stakeholders will be provided an opportunity to comment and provide input regarding those assumptions. Following that meeting, and once the study coordination team has an opportunity to perform its initial analyses of the inter-regional Economic Planning Study(ies), the Participating Transmission Owners will then conduct the “2<sup>nd</sup> Inter-Regional Stakeholder Meeting.” At this meeting, the study coordination team will review the results of such initial analysis, and stakeholders will be provided an opportunity to comment and provide input regarding that initial analysis. The study coordination team will then finalize its analysis of the inter-regional study(ies) and draft the Economic Planning Study(ies) report(s), which will be presented to the stakeholders at the “3<sup>rd</sup> Inter-Regional Stakeholder Meeting.” Stakeholders will be provided an opportunity to comment and provide input regarding the draft report(s). Subsequent to that meeting, the study coordination team will then finalize the report(s), which will be issued to the Participating Transmission Owners and stakeholders.

In addition to performing inter-regional Economic Planning Studies, the Southeast Inter-Regional Participation Process will also provide a means for the Participating Transmission Owners to review, at the Southeast Inter-Regional Participation Process stakeholder meetings, the regional data, assumptions, and assessments that are then being performed on an inter-regional basis.

### **Southeast Inter-Regional Participation Process Cycle:**

The Southeast Inter-Regional Participation Process will be performed annually. Due to the expected scope of the requested studies and size of the geographical region encompassed, the Participating Transmission Owners will perform up to five (5) inter-regional Economic Planning Studies annually, which could encompass both Step 1 and Step 2 evaluations. A Step 1 evaluation will consist of a high level screen of the requested transfer and will be performed during a single year's planning cycle. The high level screen will identify transfer constraints and likely transmission enhancements to resolve the identified constraints. The Participating Transmission Owners will also provide approximate costs and timelines associated with the identified transmission enhancements to facilitate the stakeholders' determination of whether they have sufficient interest to pursue a Step 2 evaluation. Once a Step 1 evaluation has been completed for a particular transfer, the stakeholders have the option to request a Step 2 evaluation for that transfer to be performed during the subsequent year's Inter-Regional Participation Process Cycle. If the stakeholders opt to not pursue Step 2 evaluation for the requested transfer during the subsequent year's Inter-Regional Participation Process Cycle, an Economic Planning Study of that request may be re-evaluated in the future by being submitted for a new Step 1 evaluation. In the event that the stakeholders request a Step 2 evaluation, the Participating Transmission Owners will then perform additional analysis, which may include additional coordination with external processes. The Participating Transmission Owners will then develop detailed cost estimates and timelines associated with the final transmission enhancements. The Step 2 evaluation will ensure that sufficient coordination can occur with stakeholders and among the impacted Participating Transmission Owners. In addition, the Step 2 evaluation will provide sufficient time to ensure that the inter-regional study results are meaningful and meet the needs of the stakeholders.

It is important to note that the Participating Transmission Owners expect that a Step 2 evaluation will be completed prior to interested parties requesting to sponsor transmission enhancements identified in an Economic Planning Study. However, the Participating Transmission Owners will work with stakeholders if a situation develops where interested parties attempt to sponsor projects identified in a Step 1 evaluation and there is a compelling reason (*e.g.* where time is of the essence).

### **Inter-Regional Cost Allocation:**

The cost allocation for Inter-Regional Economic Upgrade projects will be determined in accordance with the cost allocation principle adopted by each Participating Transmission Owner's Regional Planning Process in which each portion of the construction of such upgrades would occur. The cost allocation principle for each SIRPP Regional Planning Process is posted on the SIRPP website. Typically, since Inter-Regional Economic Upgrade projects will likely consist of improvements that will be physically located in the footprints of multiple Regional Planning Processes, this approach means the cost allocation for each part of the Inter-Regional Economic Upgrade project or each project within a set of projects will be governed by the cost allocation principle adopted by the Regional Planning Process in which that part of the project or set is physically located. For example, should an Inter-Regional Economic Upgrade project

consist of a single, 100 mile 500 kV transmission line, with 30 miles physically located in Regional Planning Process “A” and the remaining 70 miles located in Regional Planning Process “B,” then the cost allocation for the 30 miles of 500 kV transmission line located in Regional Planning Process “A” would be governed by that Regional Planning Process’ cost allocation principle, and the cost allocation for the other 70 miles of 500 kV transmission line would be governed by the cost allocation principle of Regional Planning Process “B.” Should an Inter-Regional Economic Upgrade project be physically located entirely within one Regional Transmission Planning process, the costs of the project would be governed by that region’s cost allocation principle.

### **Inter-Regional Coordination of Economic Transmission Project Development:**

Once an Economic Planning Study report has been finalized, multiple stakeholders may be interested in jointly participating in the project development. An Inter-Regional process addressing each such economic upgrade request will be developed that will formalize the process of determining if there is sufficient stakeholder interest to pursue economic project development and the coordination that will be required of the impacted Transmission Owners to support this process. The Participating Transmission Owners and the stakeholders will support this process development activity beginning in 2008.

### **Stakeholder Participation in the Southeast Inter-Regional Participation Process:**

#### ***Purpose***

The purpose of the SIRPPSG is to provide a structure to facilitate the stakeholders’ participation in the Southeast Inter-Regional Participation Process. Importantly, the SIRPPSG shall have the flexibility to change the “Meeting Procedures” section discussed below but cannot change the Purpose, Responsibilities, Membership, or Data and Information Release Protocol sections absent an appropriate filing with (and order by) FERC to amend the OATT.

#### ***Responsibilities***

In general, the SIRPPSG is responsible for working with the Participating Transmission Owners on Inter-Regional Economic Planning Study requests so as to facilitate the development of such studies that meet the goals of the stakeholders. The specific responsibilities of this group include:

1. Adherence to the intent of the FERC Standards of Conduct requirements in all discussions.
2. Develop the SIRPPSG annual work plan and activity schedule.
3. Propose and select the Economic Planning Study(ies) to be evaluated (five annually).
  - a. Step 1 evaluations
  - b. Step 2 evaluations
4. The SIRPPSG should consider clustering similar Economic Planning Study requests. In this regard, if two or more of the Economic Planning Study requests are similar in nature and the Participating Transmission Owners conclude that clustering of such requests and studies is appropriate, the Participating Transmission Owners may, following communications with the SIRPPSG, cluster those studies for purposes of the transmission evaluation.



5. Provide timely input on the annual Economic Planning Study(ies) scope elements, including the following:
  - a. Study Assumptions, Criteria and Methodology
  - b. Case Development and Technical Analysis
  - c. Problem Identification, Assessment and Development of Solutions (including proposing alternative solutions for evaluation)
  - d. Comparison and Selection of the Preferred Solution Options
  - e. Economic Planning Study Results Report.
6. Providing advice and recommendations to the Participating Transmission Owners on the Southeast Inter-Regional Participation Process.

### ***Membership***

The SIRPPSG membership is open to any interested party.

### ***Meeting Procedures***

The SIRPPSG may change the Meeting Procedures criteria provided below pursuant to the voting structure in place for the SIRPPSG at that time. The currently effective Meeting Procedures for the SIRPPSG shall be provided to the Participating Transmission Owners to be posted on the SIRPP website and shall become effective once posted on that website (<http://www.southeastirpp.com>), which postings shall be made within a reasonable amount of time upon receipt by the Transmission Owners. Accordingly, the following provisions contained under this Meeting Procedures heading provide a starting-point structure for the SIRPPSG, which the SIRPPSG shall be allowed to change.

### ***Meeting Chair***

A stakeholder-elected member of the SIRPPSG will chair the SIRPPSG meetings and serve as a facilitator for the group by working to bring consensus within the group. In addition, the duties of the SIRPPSG chair will include:

1. Developing mechanisms to solicit and obtain the input of all interested stakeholders related to inter-regional Economic Planning Studies.
2. Ensuring that SIRPPSG meeting notes are taken and meeting highlights are posted on the SIRPP website (<http://www.southeastirpp.com>) for the information of the participants after all SIRPPSG meetings.

### ***Meetings***

Meetings of the SIRPPSG shall be open to all SIRPPSG members interested in inter-regional Economic Planning Studies across the respective service territories of the Participating Transmission Owners. There are no restrictions on the number of people attending SIRPPSG meetings from any interested party.

### ***Quorum***

Since SIRPPSG membership is open to all interested parties, there are no quorum requirements for SIRPPSG meetings.

### **Voting**

In attempting to resolve any issue, the goal is for the SIRPPSG to develop consensus solutions. However, in the event consensus cannot be reached, voting will be conducted with each SIRPPSG member's organization represented at the meeting (either physically present or participating via phone) receiving one vote. The SIRPPSG chair will provide notices to the SIRPPSG members in advance of the SIRPPSG meeting that specific votes will be taken during the SIRPPSG meeting. Only SIRPPSG members participating in the meeting will be allowed to participate in the voting (either physically present or participating via phone). No proxy votes will be allowed. During each SIRPP cycle, the SIRPPSG members will propose and select the inter-regional Economic Planning Studies that will be performed during that particular SIRPP cycle. The SIRPPSG will annually select up to five (5) inter-regional Economic Planning Studies, including both Step 1 evaluation(s) and any Step 2 evaluations, with any such Step 2 evaluations being performed for the previous years Step 1 studies for the pertinent transfers. Each organization represented by their SIRPPSG members will be able to cast a single vote for up to five Economic Planning Studies that their organization would like to be studied within the SIRPP cycle. If needed, repeat voting will be conducted until there are clear selections for the five Economic Planning Studies to be conducted.

### **Meeting Protocol**

In the absence of specific provisions in this document, the SIRPPSG shall conduct its meetings guided by the most recent edition of *Robert's Rules of Order, Newly Revised*.

### ***Data and Information Release Protocol***

SIRPPSG members can request data and information that would facilitate their ability to replicate the SIRPP inter-regional Economic Planning studies while ensuring that CEII and other confidential data is protected.

### **CEII Data and Information**

SIRPPSG members may be certified to obtain CEII data used in the SIRPP by following the confidentiality procedures posted on the SIRPP website (*e.g.*, making a formal request for CEII, authorizing background checks, executing the SIRPP CEII Confidentiality Agreement, etc.). The SIRPP Participating Transmission Owners reserve the discretionary right to waive the certification process, in whole or in part, for anyone that the SIRPP Participating Transmission Owners deem appropriate to receive CEII. The SIRPP Participating Transmission Owners also reserve the discretionary right to reject a request for CEII; upon such rejection, the requestor may pursue the SIRPP dispute resolution procedures set forth below.

### **Non-CEII Confidential Information**

The Participating Transmission Owners will make reasonable efforts to preserve the confidentiality of information that is confidential but not CEII in accordance with the provisions of the Tariff and the requirements of (and/or agreements with) NERC and/or SERC, as well as any agreements with the other Participating Transmission Owners and any other contractual or legal confidentiality requirements.

Without limiting the applicability of the foregoing, to the extent confidential non-CEII information is provided in the transmission planning process and is needed to participate in the transmission planning process and/or to replicate transmission planning studies, it will be made available to those SIRPPSG members who have executed the SIRPP non-CEII Confidentiality Agreement, which is posted on the SIRPP website. , Importantly, if information should prove to contain both confidential non-CEII information and CEII, then the requirements of both this section and the previous section would apply.

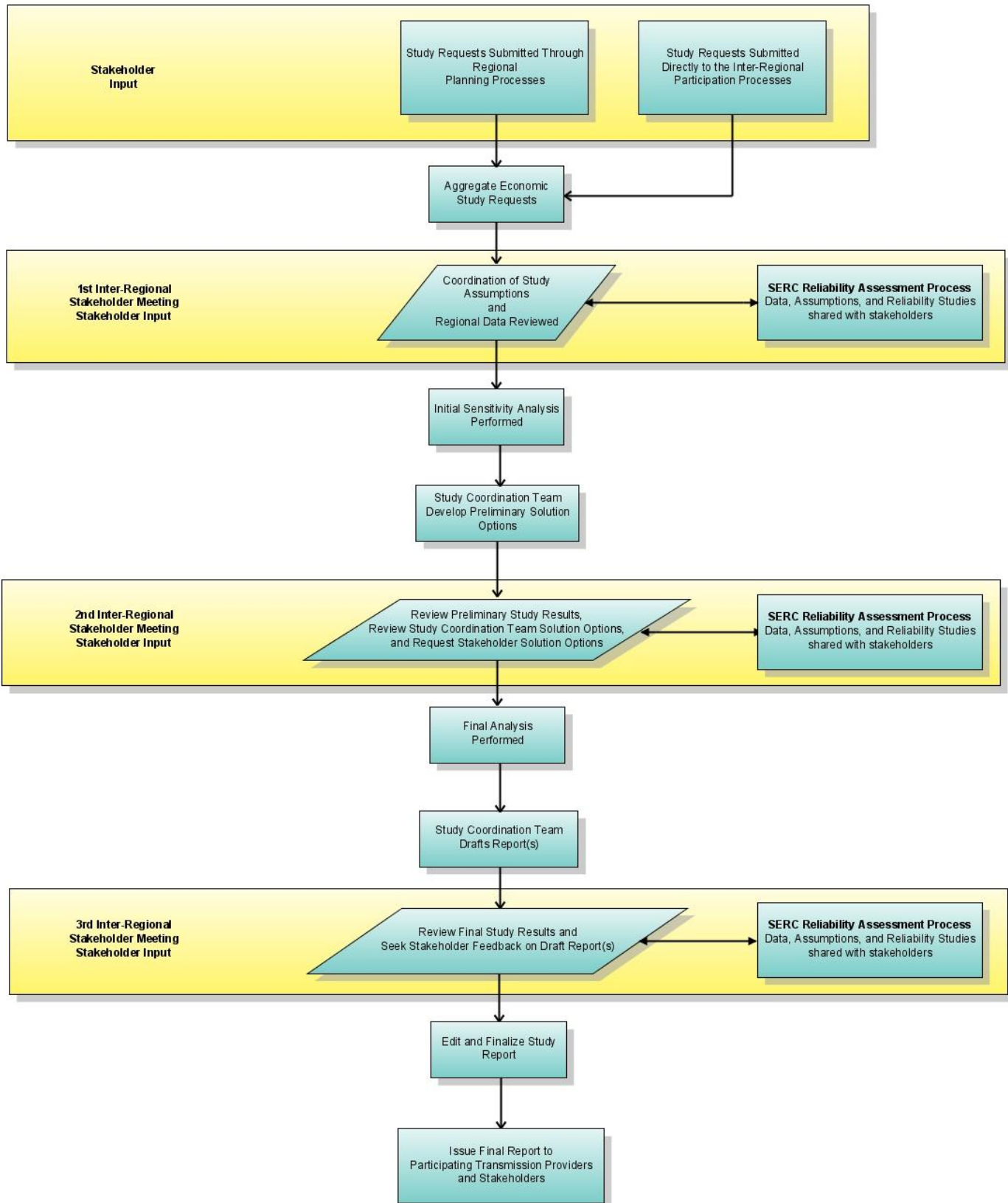
### ***Dispute Resolution***

Any procedural or substantive dispute between a stakeholder and a Participating Transmission Owner that arises from the SIRPP will be addressed by the Participating Transmission Owner's dispute resolution procedures in its respective Regional Planning Process. In addition, should the dispute only be between stakeholders with no Participating Transmission Owner involved (other than its ownership and/or control of the underlying facilities), the stakeholders will be encouraged to utilize the Commission's alternative means of dispute resolution.

Should dispute resolution proceedings be commenced in multiple Regional Planning Processes involving a single dispute among multiple Participating Transmission Owners, the affected Participating Transmission Owners, in consultation with the affected stakeholders, agree to use reasonable efforts to consolidate the resolution of the dispute such that it will be resolved by the dispute resolution procedures of a single Regional Planning Process in a single proceeding. If such a consensus is reached, the Participating Transmission Owners agree that the dispute will be addressed by the dispute resolution procedures of the selected Regional Transmission Planning Process.

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

**Southeast Inter-Regional Participation Process Diagram:**



## Appendix 6 – Economic Planning Study Agreement

Name of Project:  
Reservation (if any):  
Date Request sent to Transmission Owner:

Entity making request:		
Responsible party marking request:		
Phone:	Fax:	Email:
Nature of Request:		
Service Type:		Firm:
POR:		POD:
SOURCE:		SINK:
Transaction Period:		

Pursuant to Attachment K of the LG&E/KU Open Access Transmission Tariff, any stakeholder may request that the Transmission Owner perform or cause to be performed (by the Transmission Owner or a third party at the Transmission Owner's option) an economic planning study. This Agreement shall be signed and returned to the Transmission Owner within **15 days** in order for the economic planning study request to remain valid.

1. The performance of an economic planning study is for evaluation purposes only. The Transmission Owner is under no obligation to build any network additions or upgrades identified by an economic planning study.
2. The economic planning study will analyze the request based on the existing state of the system, as comprised by the base case and the Transmission Expansion Plan for the year in which the study request is made. The Transmission Owner shall perform the economic planning study requested herein to the extent it has the data necessary to do so. The Transmission Owner may solicit the requesting stakeholder(s) or the Transmission Owner's Load Serving Entity for additional information and data necessary to perform the requested economic planning study, but only to the extent that such data is publicly available.
3. The economic planning study shall be completed within \_\_\_ days of return of this signed Agreement. In the event the economic planning study is not completed within \_\_\_ days, the requesting stakeholder will be notified of the estimated completion date and provided an explanation of the delay.
4. The requesting entity shall pay the Transmission Owner a fee of \$\_\_\_\_\_ (\_\_\_\_\_ dollars), which must be paid before the economic planning study can commence.

I agree to the terms and conditions of this Economic Planning Study Agreement and authorize the Transmission Owner to proceed with the Economic Planning Study.

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Date)

Accepted by the Transmission Owner:

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Date)

This Economic Planning Study Agreement should be returned executed via fax for time-stamp to Transmission Owner at [\_\_\_\_\_]. An executed hard copy should also be mailed to:

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

Additional details regarding the Economic Planning Study should be coordinated through [\_\_\_\_\_] at [Phone].

This agreement completed by:  
Title:

Date:  
Phone:

## ATTACHMENT L

### CREDITWORTHINESS PROCEDURES

#### **1 OVERVIEW**

- 1.1** For the purpose of determining the ability of the Transmission Customer to meet its obligations related to service hereunder, the Transmission Owner may require reasonable credit review procedures. This review shall be made in accordance with standard commercial practices and shall specify quantitative and qualitative criteria to determine the level of secured and unsecured credit
- 1.2** Credit review procedures and determinations will be undertaken on an objective and not unduly discriminatory basis.
- 1.3** Rules, standards, and practices related to credit determination procedures that do not significantly affect transmission service may be found on the Transmission Owner's OASIS along with other information that relates to transmission service. This Attachment L provides only a summary of credit requirements and other information.

#### **2 Credit Review Procedures**

##### **2.1 Initiating a credit review.**

- 2.1.1** For the purpose of determining the creditworthiness of a Transmission Customer, the Transmission Owner may initiate credit review procedures.
- 2.1.2** Upon receipt, or during the evaluation of a request for service, the Transmission Owner may conduct an initial credit evaluation of the Transmission Customer's ability to meet the creditworthiness criteria set forth in Section 3 of this Attachment L.
- 2.1.3** The Transmission Owner shall review the Transmission Customer's credit not less than annually, utilizing the criteria set forth in Section 3 of this Attachment L. In addition, if a Transmission Customer experiences a material change in financial status, the Transmission Owner shall review the Transmission Customer's credit utilizing the criteria set forth in Section 3 of this Attachment L. A material change in financial status includes, but is not limited to: a downgrade of long or short-term debt rating by a major bond rating agency; being placed on a credit watch with negative implications by a major credit rating agency; a bankruptcy filing; any action requiring filing of a Form 8-K; insolvency; a report of a significant quarterly loss or decline in earnings; the resignation of key officer(s); and the issuance of a regulatory order or the filing of a lawsuit that could materially adversely impact current or future financial results.

**2.1.4** A credit review may be conducted by the Transmission Owner on a periodic basis or following a reported change in the creditworthiness of the Transmission Customer.

**2.2 Credit review procedure.** Credit review procedures may be undertaken by Transmission Owner's employees or by others at the Transmission Owner's direction. The Transmission Owner shall utilize reasonable methods to evaluate Transmission Customer's creditworthiness under the criteria provided in Section 3 of this Attachment L.

### **3 Credit Determination Criteria**

#### **3.1 Unsecured Credit Limit.**

The Transmission Owner shall not extend unsecured credit to a Transmission Customer in an amount greater than the Unsecured Credit Limit, even if the Transmission Customer otherwise meets the criteria for a higher unsecured credit amount. The Unsecured Credit Limit is \$1 million less all unsecured credit extended to Transmission Customer by Louisville Gas and Electric Company, Kentucky Utilities Company, and their affiliates for all services of any nature. Notwithstanding anything to the contrary in this Attachment L, the Transmission Owner shall not extend unsecured credit to a Transmission Customer in an amount greater than \$1 million.

#### **3.2 Criteria regarding determination of unsecured credit amounts.**

A Transmission Customer that meets the following credit requirements will not be required to provide security to the Transmission Owner up to the established Unsecured Credit Limit. A Transmission Customer that does not meet the following credit requirements, or that wishes to obtain service exceeding the established Unsecured Credit Limit, must provide security consistent with Section 4 below. These requirements include the following:

- (i) The Transmission Customer is not in default of its payment obligations under Part I, Section 7.3 of the Transmission Owner's Open Access Transmission Tariff ("OATT"); and
- (ii) It meets one of the following criteria:
  - a. The Transmission Customer has been in business at least one year and has a credit rating of at least Baa2 (Moody's) or BBB (Standard & Poor's); or
  - b. The Transmission Customer has been in business at least one year, and provides its most recent audited financial statements to the Transmission Owner which demonstrates that the Transmission



Customer meets standards that are at least equivalent to the standards underlying the credit ratings of Baa2 (Moody's) or BBB (Standard and Poor's). Privately held and/or non rated public entities will be reviewed in a manner consistent with producing a credit rating equivalent to the Moody's and/or Standard and Poor's credit rating. In addition, the following criteria will be considered, such as management discussion, industry trends and analysis, outside litigation, and other information determined to be relevant by the Transmission Owner. The Transmission Owner may determine that the Transmission Customer satisfies the requirements of this paragraph but that relevant factors justify establishment of an unsecured credit amount less than the Unsecured Credit Limit; or

- c. The Transmission Customer is a borrower from the Rural Utilities Service ("RUS") and has a Times Interest Earned Ratio of 1.10x or better and a Debt Service Coverage Ratio of 1.10x or better in the most recent calendar year, or is maintaining the Times Interest Earned Ratio and Debt Service Coverage Ratio as established in the Transmission Customer's RUS Mortgage; provided, however, that the Transmission Customer shall provide the Transmission Owner with such supporting detail related to the calculation of such ratios as the Transmission Owner shall reasonably request; or
- d. The Transmission Customer's parent company (the "Guarantor") meets the criteria set out in (i) and (ii)(a), (b) or (c) above, and the Guarantor provides a written guarantee (in a form acceptable to the Transmission Owner), that the parent company will be unconditionally responsible for all financial obligations associated with the Transmission Customer's receipt of transmission service.

### **3.3 Communication of credit level determinations and collateral requirements by Transmission Owner and contest of credit level determinations and collateral requirements.**

**3.3.1 Communications of credit determinations and collateral requirements by Transmission Owner.** An initial credit determination will be communicated to the Transmission Customer within five business days following the determination. All changes in credit levels and collateral requirements will be communicated to the Transmission Customer at least ten business days prior to the time that such change becomes effective.

**3.3.2 Provision of written explanation of change in credit levels and collateral requirements by Transmission Owner.** At least nine business days prior to the time that such changes are to become effective, an affected Transmission Customer may request a written explanation from

the Transmission Owner for any change in credit levels or collateral requirements. Such a written explanation will be communicated by the Transmission Owner to the Transmission Customer within two business days of the request.

**3.3.3 Contest of determination of credit levels or collateral requirements.**

At least five business days prior to the time that such changes are to become effective, an affected Transmission Customer may contest any change in credit levels or collateral requirements. Such contest must be submitted in writing and contain all facts upon which the Transmission Customer relies to support its request for credit or revised collateral requirements.

**4 Requirements for Non-Creditworthy Customers:**

A Transmission Customer that does not meet the credit standards set out in Section 3 above, or meets those credit standards set out in Section 3 above but requires additional credit from the Transmission Owner in excess of the established Unsecured Credit Limit, shall comply with one of the following:

- (i) Not less than five days prior to the commencement of service, the Transmission Customer shall provide in a form acceptable to the Transmission Owner, an unconditional and irrevocable standby letter of credit issued by a financial institution rated at least A- by S&P with greater than \$10 billion in assets (or an alternative form of security approved in writing by the Transmission Owner), which letter of credit (or other approved security) that is equal to the lesser of the total charge for service or the charge for 90 days of service; or
- (ii) For service of one month or less, the Transmission Customer shall pay the total charge for service by the later of five business days prior to the commencement of service or the time when it makes the request for transmission service; or
- (iii) For service of greater than one month, the Transmission Customer shall pay for each month's service not less than five business days prior to the beginning of the month. For Network Integration Transmission Service customers, the advance payment for each month shall be based on a reasonable estimate by the Transmission Owner of the charge for that month.

**5 Changes in Creditworthiness Status:**

If (a) a Transmission Customer or the Guarantor, if any, meets the credit requirements of Section 3.2 at the time of a credit evaluation but subsequently fails to meet those requirements at any time after it requests transmission service but before the termination of that service or (b) the Transmission Customer or the Guarantor, if any, suffers a material adverse change in creditworthiness in the opinion of the Transmission Owner, then the Transmission Customer shall, within three business days of notification by the Transmission Owner, either prepay for the next 30 days of transmission service or

provide an unconditional and irrevocable letter of credit meeting the standards noted in Section 4 (i) above (or an alternative form of security approved by the Transmission Owner in writing) in an amount equal to the charge for the next 30 days of transmission service.

## **6 Suspension of Service**

Notwithstanding any other provisions of this Tariff, if a Transmission Customer fails to provide the entirety of required financial assurances when due under this Attachment L, the Transmission Owner may suspend Transmission Service to such Transmission Customer thirty-five (35) days after Transmission Owner's notification to such Transmission Customer as provided below. The Transmission Owner shall provide at least thirty (30) days notice to FERC before suspending Transmission Service pursuant to this provision.

The Transmission Owner shall provide notice to the Transmission Customer that it must provide any required financial assurances by the deadline specified in the notice, and that the Transmission Owner may take corrective actions, including suspension of service pursuant to this Section 6 if the Transmission Customer fails to provide the required financial assurance by the specified deadline(s). Any notices sent to the Transmission Customer and to the Commission pursuant to this Attachment L may be sent concurrently.

The suspension of service under this Section 6 shall continue only for as long as the circumstances that entitle the Transmission Owner to suspend service continue. A Transmission Customer is not obligated to pay for Transmission Service that is not provided as a result of suspension of service.

**ATTACHMENT M**  
**STANDARD LARGE GENERATOR**  
**INTERCONNECTION PROCEDURES (LGIP)**

**including**

**STANDARD LARGE GENERATOR**

**INTERCONNECTION AGREEMENT (LGIA)**

**(Applicable to Generating Facilities that exceed 20 MW)**

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## Section 1. Definitions

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

**Affected System** shall mean an electric system other than the Transmission Owner'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 Owner'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 Owner 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 Owner'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 Owner'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 Transmission Owner, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission Owner's Transmission System, Transmission Owner's Interconnection Facilities or the electric systems of others to which the Transmission Owner'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



Owner's Transmission System to be eligible to deliver the Generating Facility's electric output using the existing firm or nonfirm capacity of the Transmission Owner'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 Owner 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 Owner, 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 Owner's Interconnection Facilities to obtain back feed power.

**Interconnection Customer** shall mean any entity, including the Transmission Owner or any of its Affiliates or subsidiaries, that proposes to interconnect its Generating Facility with the Transmission Owner'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 Owner's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Transmission Owner'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 Owner'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 Owner or a third party consultant for the Interconnection Customer to determine a list of facilities (including Transmission Owner'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 Owner'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 Owner'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 Owner's Transmission System.

**Interconnection Service** shall mean the service provided by the Transmission Owner associated with interconnecting the Interconnection Customer's Generating Facility to the Transmission Owner'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 Owner'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 Owner'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 Owner 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 Owner's Transmission System (1) in a manner comparable to that in which the Transmission Owner 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 Owner's Transmission System required at or beyond the point at which the Interconnection Facilities connect to the Transmission Owner's Transmission System to accommodate the interconnection of the Large Generating Facility to the Transmission Owner'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 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 Owner'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 Owner'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 Owner.

**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.

**Reliability Coordinator** shall mean the party charged with providing reliability coordination service for the Transmission Owner's system in accordance with the Amended Reliability Coordinator Agreement attached hereto as Attachment Q.

**Scoping Meeting** shall mean the meeting between representatives of the Interconnection Customer and the Transmission Owner 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 Owner 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 Owner'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 Owner's Tariff.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission Owner'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 Owner's Transmission System or on other delivery systems or other generating systems to which the Transmission Owner's Transmission System is directly connected.

**Tariff** shall mean the Transmission Owner'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 LG&E/KU, the public utility operating companies which: (i) own the Transmission System; (ii) provide open access transmission service under the Tariff; and (iii) receive payment for Transmission Service as provided for in the Tariff.

**Transmission Owner's Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Transmission Owner 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 Owner's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Transmission Owner's Control Area** shall mean the Control Area as formally designated as Transmission Owner's Control Area under the Midwest Independent System Operator's tariff.

**Transmission System** shall mean the facilities owned, controlled and operated by the Transmission Owner that are used to provide transmission service under Part II and Part III of the Transmission Owner's 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 Owner shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this LGIP. Transmission Owner will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Generating Facilities are owned by Transmission Owner, its subsidiaries or Affiliates or others.

### **2.3 Base Case Data**

Transmission Owner 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 Owner 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.

### **Section 3. Interconnection Requests**

#### **3.1 General**

An Interconnection Customer shall submit to Transmission Owner an Interconnection Request in the form of Appendix 1 to this LGIP and a refundable deposit of \$10,000. Transmission Owner 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 Owner 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 Owner 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 Owner 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 Owner'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 the 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 Owner's Transmission System, consistent with the Transmission Owner's reliability criteria and procedures. This approach assumes that some portion of existing Network Resources is



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 Owner may also study the Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the Transmission Owner 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 nonrefundable.

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 process window for the Transmission Owner's expansion planning period not to exceed seven years from the date the Interconnection Request is received by the Transmission Owner, 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 Transmission Owner's planning period. The In-Service Date may succeed the date the Interconnection Request is received by the Transmission Owner by a period up to ten years or longer where Interconnection Customer and the Transmission Owner agree, such agreement not to be unreasonably withheld.

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

Transmission Owner 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 the Transmission Owner. If an Interconnection Request fails to meet the requirements set forth in Section 3.3., the Transmission Owner 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 the Transmission Owner 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 Owner 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. The Transmission Owner 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. The Transmission Owner 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 Owner 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 of the Transmission Owner, the list will not disclose the identity of Interconnection Customer until Interconnection Customer executes an LGIA or requests that the

Transmission Owner file an unexecuted LGIA with FERC. Before holding a Scoping Meeting with its Affiliate, the Transmission Owner shall post on its OASIS an advance notice of its intent to do so. The Transmission Owner 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 Owner's OASIS site subsequent to the meeting between Interconnection Customer and the Transmission Owner to discuss the applicable study results. The Transmission Owner shall also post any known deviations in the Large Generating Facility's In-Service Date.

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

The Transmission Owner 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. The Transmission Owner will include such Affected System Operators in all meetings held with Interconnection Customer as required by this LGIP. Interconnection Customer will cooperate with the Transmission Owner in all matters related to the conduct of studies and the determination of modifications to Affected Systems. Affected System Operators shall cooperate with the Transmission Owner 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 the Transmission Owner. In addition, if Interconnection Customer fails to adhere to all requirements of this LGIP, except as provided in Section 13.5 (Disputes), the Transmission Owner 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 cure the deficiency or to notify the Transmission Owner 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 the Transmission Owner all costs that the Transmission Owner prudently incurs with respect to that Interconnection Request prior to the Transmission Owner receipt of notice described above. Interconnection Customer must pay all monies due to the Transmission Owner before it is allowed to obtain any Interconnection Study data or results.

Transmission Owner shall (i) update its 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 Owner has incurred, including interest calculated in accordance with 18 CFR § 35.19a(a)(2). In the event of such withdrawal, the Transmission Owner, subject to the confidentiality provisions of Section 13.1, shall provide, at Interconnection Customer's request, all information that the Transmission Owner developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

## **Section 4. Queue Position**

### **4.1 General.**

The Transmission Owner 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 the Transmission Owner 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.

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

### **4.2 Clustering.**

At the Transmission Owner'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 the Transmission Owner 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. The Transmission Owner 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 Owner'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 the Transmission Owner, 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 the Transmission Owner 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 the Transmission Owner and Interconnection Customer, such acceptance not to be unreasonably withheld, the Transmission Owner 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 the Transmission Owner, 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 the Transmission Owner, 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 the Transmission Owner evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, the Transmission Owner 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, 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, the Transmission Owner shall commence and perform any necessary additional studies as soon as practicable, but in no event shall the Transmission Owner 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, to the extent practicable.

**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, the Transmission Owner must offer Interconnection Customer the option of either continuing under the Transmission Owner'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 shall be grandfathered.

**5.1.2 Transition Period.**

To the extent necessary, the Transmission Owner 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 the Transmission Owner; (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 the Transmission Owner to the extent consistent with the intent and process provided for under this LGIP.

**5.2**

**Section 6. Interconnection Feasibility Study**

**6.1 Interconnection Feasibility Study Agreement.**

Simultaneously with the acknowledgement of a valid Interconnection Request, the Transmission Owner 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 the Transmission Owner's receipt of such designation, the Transmission Owner shall tender to Interconnection Customer the Interconnection Feasibility Study Agreement signed by the Transmission Owner, which includes a good faith estimate of the cost for completing the Interconnection Feasibility Study. Interconnection Customer shall execute and deliver to the Transmission Owner 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 the Transmission Owner, 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 the Transmission Owner, 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 the Transmission Owner 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 the Transmission Owner agree to forgo the Interconnection Feasibility Study, the Transmission Owner 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 Owner shall utilize existing studies to the extent practicable when it performs the study. Transmission Owner shall use Reasonable Efforts to complete the Interconnection Feasibility Study no later than forty-five (45) Calendar Days after it receives the fully executed Interconnection Feasibility Study Agreement. At the request of Interconnection Customer or at any time the Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Feasibility Study, the Transmission Owner shall notify Interconnection Customer as to the schedule status of the Interconnection Feasibility Study. If the Transmission Owner 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, the Transmission Owner 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 the Transmission Owner.**

Within ten (10) Business Days of providing an Interconnection Feasibility Study report to Interconnection Customer, the Transmission Owner 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, the Transmission Owner 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, the Transmission Owner 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 the Transmission Owner for the actual cost of the Interconnection System Impact Study. Within three (3) Business Days following the Interconnection Feasibility

Study results meeting, the Transmission Owner shall provide to Interconnection Customer a nonbinding 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 the Transmission Owner 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, the Transmission Owner 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 Interconnection Customer or Transmission Owner, and acceptable to the other party, 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 the Transmission Owner 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**

The Transmission Owner shall coordinate the Interconnection System Impact Study with any Affected System that is affected by the Interconnection Request pursuant to Section 3.5 above. The Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The Transmission Owner 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 the Transmission Owner uses Clustering, the Transmission Owner 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 the Transmission Owner determines that it will not meet the required time frame for completing the Interconnection System Impact Study, the Transmission Owner shall notify Interconnection Customer as to the schedule status of the Interconnection System Impact Study. If the Transmission Owner 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, the Transmission Owner 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 the Transmission Owner.**

Within ten (10) Business Days of providing an Interconnection System Impact Study report to Interconnection Customer, Transmission Owner 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 the Transmission Owner 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, the Transmission Owner shall provide to Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix 4 to this LGIP. The Interconnection Facilities Study Agreement shall provide that Interconnection Customer shall compensate the Transmission Owner for the actual cost of the Interconnection Facilities Study. Within three (3) Business Days following the Interconnection System Impact Study results meeting, the Transmission Owner 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 the Transmission Owner 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** The Transmission Owner 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. The Transmission Owner 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 Owner'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.**

The Transmission Owner shall coordinate the Interconnection Facilities Study with any Affected System pursuant to Section 3.5 above. The Transmission Owner shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. The Transmission Owner 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 the Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Facilities Study, the Transmission Owner shall notify Interconnection Customer as to the schedule status of the Interconnection Facilities Study. If the Transmission Owner 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 the Transmission Owner, which the Transmission Owner shall include in the final report. The Transmission Owner shall issue the final Interconnection Facilities Study report to Interconnection Customer 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. The Transmission Owner may reasonably extend such fifteen-day period upon notice to Interconnection Customer if Interconnection Customer's comments require the Transmission Owner to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities Report. Upon request, the Transmission Owner 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 the Transmission Owner.**

Within ten (10) Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, Transmission Owner 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, the Transmission Owner 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 the Transmission Owner shall offer the Interconnection Customer, an E&P Agreement that authorizes the Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. The E&P Agreement shall be between Interconnection Customer and the Transmission Owner. However, the Transmission Owner 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 Owner may elect: (i) to take title to the equipment, in which event Transmission Owner 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) 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 the Transmission Owner shall perform a reasonable number of Optional Studies. The request shall describe the assumptions that Interconnection Customer wishes the Transmission Owner 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, the Transmission Owner 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) the Transmission Owner's estimate of the cost of the Optional Interconnection Study. To the extent known by the Transmission Owner, 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, the Transmission Owner 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 the Transmission Owner.

### **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 Owner'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. The Transmission Owner 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. The Transmission Owner 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 the Transmission Owner within ten (10) Business Days of Interconnection Customer receipt of the Optional Interconnection Study Agreement. The Transmission Owner 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 the Transmission Owner 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 the Transmission Owner or refunded to Interconnection Customer, as appropriate. Upon request, in addition to furnishing copies of the draft and final versions of the Optional Studies, the Transmission Owner 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, the Transmission Owner shall tender a draft LGIA, together with draft appendices completed to the extent practicable. The draft LGIA shall be in the form of a 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 Owner 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 Owner 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. The Transmission Owner 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 the Transmission Owner (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 the Transmission Owner; or (ii) request in writing that the Transmission Owner 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, the Transmission Owner shall file the LGIA with FERC, together with its explanation of any matters as to which Interconnection Customer and Transmission Owner disagree and support for the costs that the Transmission Owner proposes to charge to Interconnection Customer under the LGIA. An unexecuted LGIA should contain terms and conditions deemed appropriate by the Transmission Owner 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 Owner 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 Owner shall promptly comply with the unexecuted LGIA, subject to modification by FERC.

### **Section 12. Construction of Transmission Owner's Interconnection Facilities and Network Upgrades**

#### **12.1 Schedule.**

Transmission Owner and Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of Transmission Owner's Interconnection Facilities and the Network Upgrades. Such schedule shall be coordinated with the Transmission Owner, taking reasonable account of outage

schedules, prior scheduled construction projects, and other necessary scheduling considerations.

## **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 the Transmission Owner 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 Owner will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that Interconnection Customer commits to pay the Transmission Owner: (i) any associated expediting costs and (ii) the cost of such Network Upgrades.

The Transmission Owner 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 the Transmission Owner 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. The Transmission Owner 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. The Transmission Owner 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 Owner.**

An Interconnection Customer with an LGIA, in order to maintain its In-Service Date, may request that the Transmission Owner 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 the Transmission Owner involving its facilities, in time to support such In-Service Date. Upon such request, the Transmission Owner will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that Interconnection Customer commits to pay the Transmission Owner 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.

##### **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 are 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 another Party. The disclosure by each Party another Party of Confidential Information shall not be deemed a waiver by any 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, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to any other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

**13.1.5 Standard of Care.**

Parties shall use at least the same standard of care to protect Confidential Information received as used to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to another 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 a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide other Parties with prompt notice of such request(s) or requirement(s) so that the other

Parties may seek an appropriate protective order or waive compliance with the terms of the LGIA.

Notwithstanding the absence of a protective order or waiver, a 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 another Party's Breach of its obligations under this Section 13.1. Each Party accordingly agrees that the other Parties 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

**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 another Party to any person

not employed or retained by such 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 or Reliability Coordinator. 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** The Transmission Owner 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 Owner may use the services of subcontractors as it deems appropriate to perform its obligations under this LGIP. Transmission Owner 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.**

The Transmission Owner 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 therefor. The Transmission Owner 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 the Transmission Owner 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 the Transmission Owner to utilize a third party consultant reasonably acceptable to Interconnection Customer and the Transmission Owner to perform such Interconnection Study under the direction of the Transmission Owner. At other times, the Transmission Owner 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 the Transmission Owner determines that doing so will help maintain or accelerate the study process for Interconnection Customer's pending Interconnection Request and not interfere with the Transmission Owner'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 Owner shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. The Transmission Owner 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 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 the Transmission Owner 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 Owner 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 a 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; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Section 13, the terms of this Section 13 shall prevail.

### **13.5.3 Arbitration Decisions.**

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



the Federal Arbitration Act or the Administrative Dispute Resolution Act. 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 Owners That Own Facilities Financed by Local Furnishing Bonds.**

This provision is applicable only to a Transmission Owner 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, the Transmission Owner 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 Owner's facilities that would be used in providing such Interconnection Service.

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

If the Transmission Owner 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 Owner's Tariff.

**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 the Transmission Owner'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 the Transmission Owner]

9. Representative of Interconnection Customer to contact:

[To be completed by Interconnection Customer]

10. This Interconnection Request is submitted by:

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

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

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

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

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

**Attachment A to Appendix 1  
 Interconnection Request**

**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<sub>2</sub> = \_\_\_\_\_ lb. ft.<sup>2</sup>

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

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

**FIELD TIME CONSTANT DATA (SEC)**

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

### ARMATURE TIME CONSTANT DATA (SEC)

Three Phase Short Circuit  $T_{a3}$  \_\_\_\_\_  
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  $I_2^2 t =$  \_\_\_\_\_  
Field Current at Rated kVA, Armature Voltage and PF = \_\_\_\_\_ amps  
Field Current at Rated kVA and Armature Voltage, 0 PF = \_\_\_\_\_ amps  
Three Phase Armature Winding Capacitance = \_\_\_\_\_ microfarad  
Field Winding Resistance = \_\_\_\_\_ ohms \_\_\_\_\_ °C  
Armature Winding Resistance (Per Phase) = \_\_\_\_\_ ohms \_\_\_\_\_ °C

### CURVES

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

### GENERATOR STEP-UP TRANSFORMER DATA RATINGS

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

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

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

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

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

### IMPEDANCE

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

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

### EXCITATION SYSTEM DATA

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

### GOVERNOR SYSTEM DATA

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

### WIND GENERATORS

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

\_\_\_\_\_

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

Inverter manufacturer, model name, number, and version:

\_\_\_\_\_

List of adjustable setpoints for the protective equipment or software:

\_\_\_\_\_

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

## INDUCTION GENERATORS

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

Note: Please consult the Transmission Owner prior to submitting the Interconnection Request to determine if the information designated by (\*) is required Original Sheet No. 232

**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 Owner"). Interconnection Customer and Transmission Owner each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

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

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

**WHEREAS**, Interconnection Customer has requested Transmission Owner to perform an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Large Generating Facility to the Transmission System of the Transmission Owner, 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 Owner's FERC-approved LGIP.
- 2.0 Interconnection Customer elects and Transmission Owner 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. The Transmission Owner 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, the Transmission Owner shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Feasibility Study.
- Any difference between the deposit and the actual cost of the study shall be paid by or refunded to Interconnection Customer, as appropriate.
- 7.0 Miscellaneous. The Interconnection Feasibility Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the 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 Owner]**

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

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

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

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

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

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

**[Insert name of Interconnection Customer]**

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

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

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

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

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

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 the Transmission Owner]

**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 \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ ("Transmission Owner"). Interconnection Customer and Transmission Owner 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 Owner's Transmission System;

**WHEREAS**, Transmission Owner 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 the Transmission Owner does not require the Interconnection Feasibility Study.); and

**WHEREAS**, Interconnection Customer has requested the Transmission Owner 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 FERC-approved LGIP.
- 2.0 Interconnection Customer elects and the Transmission Owner 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. The Transmission Owner 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 Owner'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, the Transmission Owner 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 Owner]**

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 the Transmission Owner]

**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 \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ ("Transmission Owner"). Interconnection Customer and Transmission Owner 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 Owner 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 the Transmission Owner to perform an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the Transmission System.

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the FERC-approved LGIP.
- 2.0 Interconnection Customer elects and the Transmission Owner 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 Owner 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 Owner 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 Owner]**

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

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

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

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

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

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

**[Insert name of Interconnection Customer]**

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

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

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

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

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

Transmission Owner 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 Owner station. Number of generation connections:

On the one line diagram indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

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

Will an alternate source of auxiliary power be available during CT/PT maintenance?  
\_\_\_Yes \_\_\_No

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? \_\_\_Yes \_\_\_No (Please indicate on one line diagram).

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

---

What protocol does the control system or PLC use?

---

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

Physical dimensions of the proposed interconnection station:

---

Bus length from generation to interconnection station:

---

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

---

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



**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 \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ ("Transmission Owner"). Interconnection Customer and Transmission Owner 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 the Transmission Owner 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 the Transmission Owner 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 the FERC-approved LGIP.
- 2.0 Interconnection Customer elects and the Transmission Owner 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 Owner'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.

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

Upon receipt of the Optional Interconnection Study, the Transmission Owner 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 Owner]**

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

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

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

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

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

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

**[Insert name of Interconnection Customer]**

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

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

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

**APPENDIX 6 TO THE LGIP**  
**STANDARD LARGE GENERATOR**  
**INTERCONNECTION AGREEMENT (LGIA)**

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Appendix A - Interconnection Facilities, Network Upgrades, and Distribution Upgrades

Appendix B – Milestones

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## 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 Owner") ("Transmission Owner"). Interconnection Customer and Transmission Owner each may be referred to as a "Party" or collectively as the "Parties."

### Recitals

**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 Owner have agreed to enter into this Agreement for the purpose of interconnecting the Large Generating Facility with the Transmission Owner's 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 Owner'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 Owner'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 Owner 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 Owner'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 Owner'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 the Transmission Owner, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission Owner's Transmission System, Transmission Owner's Interconnection Facilities or the electric systems of others to which the Transmission Owner'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 Owner's Transmission System to be eligible to deliver the Generating Facility's electric output using the existing firm or nonfirm capacity of the Transmission Owner'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 Owner 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 Owner, 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 Owner's Interconnection Facilities to obtain back feed power.

**Interconnection Customer** shall mean any entity, including the Transmission Owner or any of the Affiliates or subsidiaries of either, that proposes to interconnect its Generating Facility with the Transmission Owner'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 Owner's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Transmission Owner'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 Owner'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 Owner or a third party consultant for the Interconnection Customer to determine a list of facilities (including Transmission Owner'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 Owner'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 Owner'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 Owner's Transmission System.

**Interconnection Service** shall mean the service provided by the Transmission Owner associated with interconnecting the Interconnection Customer's Generating Facility to the Transmission Owner'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 Owner'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 Owner'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 Transmission Owner 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 Owner's Transmission System (1) in a manner comparable to that in which the Transmission Owner 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 Owner's Transmission System required at or beyond the point at which the Interconnection Facilities connect to the Transmission Owner's Transmission System to

accommodate the interconnection of the Large Generating Facility to the Transmission Owner'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 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 Owner'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 Owner'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 Owner.

**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.

**Reliability Coordinator** shall mean the party charged with providing reliability coordination service for the Transmission Owner's system in accordance with the Amended Reliability Coordinator Agreement attached hereto as Attachment Q.

**Scoping Meeting** shall mean the meeting between representatives of the Interconnection Customer and the Transmission Owner 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 Owner 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 Owner'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 Owner's Tariff.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission Owner'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 Owner's Transmission System or on other delivery systems or other generating systems to which the Transmission Owner's Transmission System is directly connected.

**Tariff** shall mean the Transmission Owner'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 LG&E/KU, the public utility operating companies which: (i) own the Transmission System; (ii) provide open access transmission service under the Tariff; and (iii) receive payment for Transmission Service as provided for in the Tariff.

**Transmission System** shall mean the facilities owned, controlled and operated by the Transmission Owner that are used to provide transmission service under Part II and Part III of 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 Owner 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 Owner ninety (90) Calendar Days advance written notice, or by Transmission Owner notifying FERC after the Generating Facility permanently ceases Commercial Operation.

### **2.3.2 Default**

Any 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 Parties, as of the date of the other Parties 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 Owner's Interconnection Facilities that have not yet been constructed or installed, Transmission Owner 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 Owner 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 Owner for any or all such costs of materials or equipment not taken by Interconnection Customer, Transmission Owner shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by

Transmission Owner 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 Owner has incurred expenses and has not been reimbursed by Interconnection Customer.

**2.4.2** Transmission Owner 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 Owner 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 a 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 another 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**

The Transmission Owner 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 Owner with respect to such filing and to provide any information reasonably requested by Transmission Owner 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 Owner shall construct facilities identified in Attachment A.

##### **4.1.1.2 Transmission Delivery Service Implications**

Under Energy Resource Interconnection Service, Interconnection Customer will be eligible to inject power from the Large Generating Facility into and deliver power across the interconnecting Transmission Owner'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 Owner'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 Owner'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 Owner'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 Owner 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 Owner integrates its generating facilities to serve native load customers; or (2) in an ISO or RTO with market based congestion management, in the same manner as all Network Resources. To the extent Interconnection Customer wants to receive Network Resource Interconnection Service, Transmission Owner 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 Owner'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 Owner'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 Owner's Transmission System without incurring congestion costs. In the event of transmission constraints on Transmission Owner's Transmission System, Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in Transmission Owner'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 Owner 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 Owner'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 Owner's Transmission System, such request may require additional studies and upgrades in order for Transmission Owner to grant such request.

**4.2 Provision of Service**

Transmission Owner 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 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 Owner'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 Owner'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 Owner shall design, procure, and construct Transmission Owner's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete Transmission Owner's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B, Milestones. Transmission Owner 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 Owner reasonably expects that it will not be able to complete Transmission Owner's Interconnection Facilities and Network Upgrades by the specified dates, Transmission Owner 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 Owner, it shall so notify Interconnection Customer within thirty (30) Calendar Days, and Transmission Owner shall assume responsibility for the design, procurement and construction of Transmission Owner's Interconnection Facilities by the designated dates.

If Transmission Owner subsequently fails to complete Transmission Owner'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 Owner 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 Transmission Owner fails to install equipment.

### **5.1.3 Option to Build**

If the dates designated by Interconnection Customer are not acceptable to Transmission Owner, Transmission Owner 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 Owner's Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in Article 5.1.2. Transmission Owner and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A. Except for Stand Alone Network Upgrades,

Interconnection Customer shall have no right to construct Network Upgrades under this option.

#### **5.1.4 Negotiated Option**

If Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, Interconnection Customer shall so notify Transmission Owner 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 Owner's Interconnection Facilities and Stand Alone Network Upgrades by Interconnection Customer) pursuant to which Transmission Owner is responsible for the design, procurement and construction of Transmission Owner's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, Transmission Owner shall assume responsibility for the design, procurement and construction of Transmission Owner'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 Owner's Interconnection Facilities and Stand Alone Network Upgrades,

(1) Interconnection Customer shall engineer, procure equipment, and construct Transmission Owner'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 Owner;

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

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

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

(5) at any time during construction, Transmission Owner shall have the right to gain unrestricted access to Transmission Owner'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 Owner's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Transmission Owner, Interconnection Customer shall be obligated to remedy deficiencies in that portion of Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(7) Interconnection Customer shall indemnify Transmission Owner for claims arising from Interconnection Customer's construction of Transmission Owner'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 Owner's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Owner;

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

(10) Transmission Owner shall approve and accept for operation and maintenance Transmission Owner'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 Owner "as-built" drawings, information, and any other documents that are reasonably required by Transmission Owner to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by Transmission Owner.

### **5.3 Liquidated Damages**

The actual damages to Interconnection Customer, in the event Transmission Owner's Interconnection Facilities or Network Upgrades are not completed by the dates designated by Interconnection Customer and accepted by Transmission Owner 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 Owner to Interconnection Customer in the event that Transmission Owner does not complete any portion of Transmission Owner's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal

to ½ of 1 percent per day of the actual cost of Transmission Owner's Interconnection Facilities and Network Upgrades, in the aggregate, for which Transmission Owner 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 Owner's Interconnection Facilities and Network Upgrades for which Transmission Owner has assumed responsibility to design, procure, and construct. The foregoing payments will be made by Transmission Owner 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 Owner'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 Owner'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 Owner'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 Owner's delay; (2) Transmission Owner'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 Owner or any cause beyond Transmission Owner's reasonable control or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of Transmission Owner'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 Owner 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 the Transmission Owner. The requirements of this paragraph shall not apply to wind generators.

#### **5.5 Equipment Procurement**

If responsibility for construction of Transmission Owner's Interconnection Facilities or Network Upgrades is to be borne by Transmission Owner, then

Transmission Owner shall commence design of Transmission Owner'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 Owner has completed the Facilities Study pursuant to the Facilities Study Agreement;
- 5.5.2** Transmission Owner 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 Owner in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

## **5.6 Construction Commencement**

Transmission Owner shall commence construction of Transmission Owner'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 Owner's Interconnection Facilities and Network Upgrades;
- 5.6.3** Transmission Owner 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 Owner 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 Owner's Interconnection Facilities will not be required until after the specified In-Service Date, Interconnection Customer will provide written notice to Transmission Owner of such later date upon which the completion of Transmission Owner'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 Owner'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 Owner'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 Owner 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 Owner's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this LGIA. Transmission Owner 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 Owner 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 Owner shall review such specifications to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of Transmission Owner 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 Owner's Review**

Transmission Owner'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 Owner, in accordance with Good Utility

Practice, to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of Transmission Owner.

### **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 Owner "as-built" drawings, information and documents for the ICIF, such as: a one-line diagram, a site plan showing the Large Generating Facility and the ICIF, plan and elevation drawings showing the layout of the ICIF, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the ICIF, and the impedances (determined by factory tests) for the associated step-up transformers and the Large Generating Facility. The Interconnection Customer shall provide Transmission Owner 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 Owner's Interconnection Facilities Construction**

Transmission Owner'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 Owner shall deliver to Interconnection Customer the following "as-built" drawings, information and documents for Transmission Owner's Interconnection Facilities [include appropriate drawings and relay diagrams].

### **5.12 Access Rights**

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



Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

**5.13 Lands of Other Property Owners**

If any part of Transmission Owner's Interconnection Facilities and/or Network Upgrades is to be installed on property owned by persons other than Interconnection Customer or Transmission Owner, 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 Owner's Interconnection Facilities and/or Network Upgrades upon such property.

**5.14 Permits**

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 Owner shall provide permitting assistance to Interconnection Customer comparable to that provided to Transmission Owner's own, or an Affiliate's generation.

**5.15 Early Construction of Base Case Facilities**

Interconnection Customer may request Transmission Owner to construct, and Transmission Owner 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 Owner, to suspend at any time all work by Transmission Owner associated with the construction and installation of Transmission Owner'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 Owner's safety and reliability criteria. In such event, Interconnection Customer shall be responsible for all reasonable and necessary costs which Transmission Owner (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 Owner cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Transmission Owner shall obtain Interconnection Customer's authorization to do so.

Transmission Owner 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 Owner required under this LGIA pursuant to this Article 5.16, and has not requested Transmission Owner 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 Owner, 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 Owner for the installation of Transmission Owner'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 Owner for Transmission Owner'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 Owner'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 nontaxable treatment.

At Transmission Owner's request, Interconnection Customer shall provide Transmission Owner with a report from an independent engineer confirming its representation in clause (iii), above. Transmission Owner represents and covenants that the cost of Transmission Owner'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 Owner**

Notwithstanding Article 5.17.1, Interconnection Customer shall protect, indemnify and hold harmless Transmission Owner from the cost consequences of any current tax liability imposed against Transmission Owner as the result of payments or property transfers made by Interconnection Customer to Transmission Owner 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 Owner.

Transmission Owner 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 Owner has determined, in good faith, that the payments or property transfers made by Interconnection Customer to Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Transmission Owner to report payments or property as income subject to taxation; provided, however, that Transmission Owner may require Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to Transmission Owner (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 Owner 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 Owner of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by Transmission Owner 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 Owner, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on Transmission Owner ("Current Taxes") on the excess of (a) the gross income realized by Transmission Owner as a result of payments or property transfers made by Interconnection Customer to Transmission Owner 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 Owner 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 Owner's composite federal and state tax rates at the time the payments or property transfers are received and Transmission Owner 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 Owner's anticipated tax depreciation deductions as a result of such payments or property transfers by Transmission Owner'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 Owner 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 Owner 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 Owner and Interconnection Customer shall cooperate in good faith with respect to the submission of such request.

Transmission Owner 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 Owner 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 Owner's Interconnection Facilities are placed in service, (i) Interconnection Customer Breaches the covenants contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this LGIA terminates and Transmission Owner 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 Owner, 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 Owner's receipt of payments or property constitutes income that is subject to taxation, Transmission Owner 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 Owner may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon Interconnection Customer's written request and sole expense, Transmission Owner may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. Transmission Owner 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 Owner 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 Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. At any time during the contest, Transmission

Owner may agree to a settlement either with Interconnection Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Transmission Owner, 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 Owner 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 Owner which holds that any amount paid or the value of any property transferred by Interconnection Customer to Transmission Owner 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 Owner in good faith that any amount paid or the value of any property transferred by Interconnection Customer to Transmission Owner under the terms of this LGIA is not taxable to Transmission Owner, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by Interconnection Customer to Transmission Owner are not subject to federal income tax, or (d) if Transmission Owner 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 Owner pursuant to this LGIA, Transmission Owner shall promptly refund to Interconnection Customer the following:

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

(ii) interest on any amounts paid by Interconnection Customer to Transmission Owner for such taxes which Transmission Owner 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 Owner refunds such payment to Interconnection Customer, and

(iii) with respect to any such taxes paid by Transmission Owner, any refund or credit Transmission Owner 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 Owner for such overpayment of taxes (including any reduction in interest otherwise payable by Transmission Owner to any Governmental Authority resulting from an offset or credit); provided, however, that Transmission Owner will remit such amount promptly to Interconnection Customer only after and to the extent that Transmission Owner has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to Transmission Owner'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 Owner may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Transmission Owner for which Interconnection Customer may be required to reimburse Transmission Owner under the terms of this LGIA. Interconnection Customer shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Interconnection Customer and Transmission Owner 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 Owner 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 Owner.

#### **5.18 Tax Status**

Each Party shall cooperate with the other Parties to maintain the other Parties tax status. Nothing in this LGIA is intended to adversely affect any Transmission Owner'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**

Each 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 Owner 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 Owner's Interconnection Facilities or Network Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof.

### **5.19.2 Standards**

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

### **5.19.3 Modification Costs**

Interconnection Customer shall not be directly assigned for the costs of any additions, modifications, or replacements that Transmission Owner makes to Transmission Owner's Interconnection Facilities or the Transmission System to facilitate the interconnection of a third party to Transmission Owner's Interconnection Facilities or the Transmission System, or to provide transmission service to a third party under Transmission Owner'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 Owner shall test Transmission Owner'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 Parties in advance of its performance of tests of its Interconnection Facilities. The other Parties have the right, at their 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 another 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 another Party's System Protection Facilities and other protective equipment; and (iii) review another 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 Parties. The exercise or nonexercise 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 Owner 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 Owner's option, compensated to, the Point of Interconnection. Transmission Owner 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 Owner'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 Owner 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 Owner shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable ANSI standards.

## **7.4 Testing of Metering Equipment**

Transmission Owner shall inspect and test all its Metering Equipment upon installation and at least once every two (2) years thereafter. If requested to do so by Interconnection Customer, Transmission Owner shall, at Interconnection Customer's expense, inspect or test Metering Equipment more frequently than every two (2) years. Transmission Owner 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 Owner's failure to maintain, then Transmission Owner 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 Owner 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 Owner 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 Owner's Transmission System dispatcher or representative designated by Transmission Owner. 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 Owner 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 Owner. 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 Owner at Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by Transmission Owner 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 Owner. Instantaneous bi-directional analog real power and reactive power flow information must be telemetered directly to the location(s) specified by Transmission Owner.

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 Owner 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 Owner Obligations**

Transmission Owner shall cause the Transmission System and Transmission Owner's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this LGIA. Transmission Owner may provide operating instructions to Interconnection Customer consistent with this LGIA and Transmission Owner's operating protocols and procedures as they may change from time to time. Transmission Owner 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 Owner's Transmission System.

## **9.6 Reactive Power**

### **9.6.1 Power Factor Design Criteria**

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

### **9.6.2 Voltage Schedules**

Once Interconnection Customer has synchronized the Large Generating Facility with the Transmission System, Transmission Owner 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 Owner's voltage schedules shall treat all sources of reactive power in the Control Area in an equitable and not unduly discriminatory manner. Transmission Owner 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 the Transmission Owner, 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 Owner is required to pay Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from the Large Generating Facility when Transmission Owner requests Interconnection Customer to operate its Large Generating Facility outside the range specified in Article 9.6.1, provided that if Transmission Owner pays its own or affiliated generators for reactive power service within the specified range, Transmission Owner 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 Parties remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact the other Parties 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 Parties of such removal.

#### **9.7.1.2 Outage Schedules**

Transmission Owner shall post scheduled outages of the transmission facilities on the OASIS. Interconnection Customer shall submit its planned maintenance schedules for the Large Generating Facility to Transmission Owner for a minimum of a rolling twenty-four month period. Interconnection Customer shall update its planned maintenance schedules as necessary. Transmission Owner 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 criteria in determining Transmission System reliability. Transmission Owner 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 Owner'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 another 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 Parties, 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 Owner may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect Transmission Owner'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 Owner 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 Owner or Reliability Coordinator shall notify Interconnection Customer in advance regarding the timing of such scheduling and further notify Interconnection Customer of the expected duration. Transmission Owner 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 Owner;
- 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 loadshed 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 Owner 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 Owner shall install at Interconnection Customer's expense any System Protection Facilities that may be required on Transmission Owner'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 Owner'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 undervoltage, 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**

No 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 Parties a copy of its switching and tagging rules that are applicable to the other Parties 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 Owner'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 Owner, 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 Owner, 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 Owner'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 Owner Obligations**

Transmission Owner shall maintain the Transmission System and Transmission Owner'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 Parties 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 Parties. Each Party shall provide advance notice to the other Parties 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 Owner'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 Owner's Interconnection Facilities**

Transmission Owner or Transmission Owner shall design, procure, construct, install, own and/or control the Transmission Owner'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 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 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 Owner 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 nonusage sensitive portion of transmission charges, as payments are made under Transmission Owner'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 CFR § 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 Owner, and Affected System Operator may adopt any alternative payment schedule that is mutually agreeable so long as Transmission Owner 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 Owner 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 Owner 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 Owner 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 transfer capability, 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 Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades, Interconnection Customer shall provide Transmission Owner, at Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Transmission Owner 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 Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Owner for these purposes.

In addition:

**11.5.1** The guarantee must be made by an entity that meets the creditworthiness requirements of Transmission Owner, 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 Owner and must specify a reasonable expiration date.

**11.5.3** The surety bond must be issued by an insurer reasonably acceptable to Transmission Owner and must specify a reasonable expiration date.

## **11.6 Interconnection Customer Compensation**

If Transmission Owner 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 Owner 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

Owner 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 Owner 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 Owner 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 another 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 another 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 Owner's Interconnection Facilities and the Network Upgrades, Transmission Owner shall provide an invoice of the final cost of the construction of Transmission Owner'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 Owner 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 any 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 Owner and Interconnection Customer, Transmission Owner 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 Owner 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 Owner 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 § a(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 Owner, 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 Owner'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 Reliability Coordinator, NERC, the Applicable Reliability Council, Applicable Laws and Regulations, and any emergency procedures agreed to by the Joint Operating Committee.

#### **13.3 Notice**

Transmission Owner shall notify Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects Transmission Owner'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 Owner 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 Owner'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 Owner'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 Owner, 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 Owner or otherwise regarding the Transmission System.

#### **13.5 Reliability Coordinator's Authority**

##### **13.5.1 General**

Reliability Coordinator may take whatever actions or inactions with regard to the Transmission System or Transmission Owner'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 Owner's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service

Reliability Coordinator shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or Interconnection Customer's Interconnection Facilities. Reliability Coordinator 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 Reliability Coordinator'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**

Reliability Coordinator 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 Owner pursuant to Transmission Owner's Tariff. When Transmission Owner can schedule the reduction or disconnection in advance, Transmission Owner shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. Transmission Owner 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 Owner. Any reduction or disconnection shall continue only for so long as reasonably necessary under Good Utility Practice. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities, and the Transmission System to their normal operating state as soon as practicable consistent with Good Utility Practice.

### **13.6 Interconnection Customer Authority**

Consistent with Good Utility Practice and the LGIA and the LGIP, Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Transmission System and Transmission Owner's Interconnection Facilities. Transmission Owner shall use Reasonable Efforts to assist Interconnection Customer in such actions.

### **13.7 Limited Liability**

Except as otherwise provided in Article 11.6.1 of this LGIA, neither Party shall be liable to the other for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.

## **Article 14. Regulatory Requirements and Governing Law**

#### **14.1 Regulatory Requirements**

Each Party's obligations under this LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this LGIA shall require Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act, the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978.

#### **14.2 Governing Law**

**14.2.1** The validity, interpretation and performance of this LGIA and each of its provisions shall be governed by 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 a Party to another Party and any instrument required or permitted to be tendered or delivered by any 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.

Each 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 another 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 another 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** A Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

### **Article 17. Default**

#### **17.1 Default**

##### **17.1.1 General**

No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act of omission of the other Party. Upon a Breach, the non-breaching Party shall give written notice of such Breach to the breaching Party. Except as provided in Article 17.1.2, the breaching Party shall have thirty (30) Calendar Days from receipt of the Default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure

within ninety (90) Calendar Days from receipt of the Default notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

#### **17.1.2 Right to Terminate**

If a Breach is not cured as provided in this article, or if a Breach is not capable of being cured within the period provided for herein, the non-breaching Party shall have the right to declare a Default and terminate this LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this LGIA, to recover from the breaching Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this LGIA.

### **Article 18. Indemnity, Consequential Damages and Insurance**

#### **18.1 Indemnity**

The Parties shall at all times indemnify, defend, and hold the other Parties 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 another 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 judgment with respect to, or pay in full, such claim.

##### **18.1.2 Indemnifying Party**

If an Indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this Article 18, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

##### **18.1.3 Indemnity Procedures**

Promptly after receipt by an Indemnified Person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may

apply, the Indemnified Person shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the Indemnifying Party and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the Indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses.

The Indemnified Person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be reasonably withheld, conditioned or delayed.

## **18.2 Consequential Damages**

Other than the Liquidated Damages heretofore described, in no event shall any 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 another 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 another 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 a Party only with the written consent of the other Parties; provided that each Party may assign this LGIA without the consent of another 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 Owner, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that Interconnection Customer will promptly notify Transmission Owner 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 Owner of the date and particulars of any such exercise of assignment right(s), including providing the Transmission Owner 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**

### **21.1 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 Owner) 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 a Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Article 22 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

#### **22.1.1 Term**

During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

#### **22.1.2 Scope**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this LGIA; or (6) is required, in accordance with Article 22.1.7 of the LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, 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**

A Party shall not 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 Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a 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, none of the Parties makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, a Party does not obligate itself to provide any particular information or Confidential Information to another 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 any 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 Parties with prompt notice of such request(s) or requirement(s) so that the other Parties 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 another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to another 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 another Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Parties 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 Parties 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 Parties to this LGIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties 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 any of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, any information that a Party claims is competitively sensitive, commercial or financial information under this LGIA ("Confidential Information") shall not be disclosed by another Party to any person not employed or retained by the other Parties, 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 Parties 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 Parties 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 Parties, 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 Parties. 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 Parties copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## **Article 24. Information Requirements**

### **24.1 Information Acquisition**

Transmission Owner 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 Owner 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 Owner shall provide Interconnection Customer a status report on the construction and installation of Transmission Owner'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 Owner 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 Owner 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 Owner pursuant to the Interconnection Study Agreement between Transmission Owner and Interconnection Customer, then Transmission Owner will conduct appropriate studies to determine the impact on Transmission Owner's 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 Owner for each individual generating unit in a station.

Subsequent to the Operation Date, Interconnection Customer shall provide Transmission Owner any information changes due to equipment replacement, repair, or adjustment. Transmission Owner shall provide Interconnection Customer any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Transmission Owner-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 Parties information that is in the possession of the disclosing Party and is necessary in order for the other Parties to: (i) verify the costs incurred by the disclosing Party for which the other Parties are 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 Parties 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 Parties, to audit at its own expense the other Party's

accounts and records pertaining to each Party's performance or each 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 Owner's efforts to allocate responsibility for the provision of reactive support to the Transmission System, Transmission Owner'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 Owner's Interconnection Facilities and Network Upgrades shall be subject to audit for a period of twenty-four months following Transmission Owner'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 each 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 Parties 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 Parties 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 Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall Transmission Owner 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 any 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 Parties 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 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 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, the Transmission Owner or the Interconnection Customer 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 Owner 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 Owner shall each appoint one representative and one alternate to the Joint Operating Committee. Each Interconnection Customer shall notify Transmission Owner 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 each 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 Owner's and Interconnection Customer's facilities at the Point of Interconnection.
- 29.1.4** Coordinate the scheduling of maintenance and planned outages on the Interconnection Facilities, the Large Generating Facility and other facilities that impact the normal operation of the interconnection of the Large Generating Facility to the Transmission System.
- 29.1.5** Ensure that information is being provided by each Party regarding equipment availability.
- 29.1.6** Perform such other duties as may be conferred upon it by mutual agreement of the Parties.

## **Article 30. Miscellaneous**

### **30.1 Binding Effect**

This LGIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

### **30.2 Conflicts**

In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.

### **30.3 Rules of Interpretation**

This LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this LGIA or

such Appendix to this LGIA, or such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

#### **30.4 Entire Agreement**

This LGIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this LGIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this LGIA.

#### **30.5 No Third Party Beneficiaries**

This LGIA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

#### **30.6 Waiver**

The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this LGIA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this LGIA. Termination or Default of this LGIA for any reason by Interconnection Customer shall not constitute a waiver of Interconnection Customer's legal rights to obtain an interconnection from Transmission Owner. Any waiver of this LGIA shall, if requested, be provided in writing.

#### **30.7 Headings**

The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.

#### **30.8 Multiple Counterparts**

This LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

**30.9 Amendment**

The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by the Parties.

**30.10 Modification by the Parties**

The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights**

Transmission Owner 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 any 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. A Party shall not have a 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 Parties.

**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 Owner]**

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 Owner'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

In-Service Date: \_\_\_\_\_

Critical milestones and responsibility as agreed to by the Parties:

	Milestone/Date	Responsible Party
(1)	_____	_____
(2)	_____	_____
(3)	_____	_____
(4)	_____	_____
(5)	_____	_____
(6)	_____	_____
(7)	_____	_____
(8)	_____	_____
(9)	_____	_____
(10)	_____	_____

Agreed to by:

For the Transmission Owner \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

**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 public utilities, 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 Owner and Interconnection Customer.

**[Date]**

**[Transmission Owner 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:

#### Notices:

Transmission Owner:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

#### Billings and Payments:

Transmission Owner:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

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

Transmission Owner:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

## **APPENDIX G TO LGIA**

### **Requirements of Generators Relying on Newer Technologies**

**ATTACHMENT N**  
**SMALL GENERATOR**  
**INTERCONNECTION PROCEDURES (SGIP)**

**AND**

**SMALL GENERATOR INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**

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## **Section 1. Application**

### **1.1 Applicability**

- 1.1.1** A request to interconnect a certified Small Generating Facility (See Appendices 3 and 4 for description of certification criteria) no larger than 2 MW shall be evaluated under the section 2 Fast Track Process. A request to interconnect a certified inverter-based Small Generating Facility no larger than 10 kW shall be evaluated under the Appendix 5 10 kW Inverter Process. A request to interconnect a Small Generating Facility larger than 2 MW but no larger than 20 MW or a Small Generating Facility that does not pass the Fast Track Process or the 10 kW Inverter Process, shall be evaluated under the section 3 Study Process.
- 1.1.2** Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Appendix 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 (Appendix 2), the Interconnection Customer may ask the Transmission Owner's Interconnection contact employee or office whether the proposed interconnection is subject to these procedures. The Transmission Owner 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**

The Transmission Owner 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 Owner'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 Owner's Transmission System, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. The Transmission Owner shall comply with reasonable requests for such information.

### **1.3 Interconnection Request**

The Interconnection Customer shall submit its Interconnection Request to the Transmission Owner, 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 Owner within three Business Days of receiving the Interconnection Request. The Transmission Owner 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 Owner 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 Owner.

### **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 Owner 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 Owner 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 Owner shall maintain a single queue per geographic region. At the Transmission Owner'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 Owner's Transmission System if the Small Generating Facility is no larger than 2 MW and if the Interconnection Customer's proposed Small Generating Facility meets the codes, standards, and certification requirements of Appendices 3 and 4 of these procedures, or the Transmission Owner has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

**2.2 Initial Review**

Within 15 Business Days after the Transmission Owner notifies the Interconnection Customer it has received a complete Interconnection Request, the Transmission Owner 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 Owner'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 Owner'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 Owner'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.<sup>1</sup>
- 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 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 Owner's electric power system due to a loss of ground during the operating time of any anti-islanding function.

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<sup>1</sup> 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, 11<sup>th</sup> edition, Donald Fink, McGraw Hill Book Company)

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
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 Owner 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 Owner 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 Owner determines that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the Transmission Owner 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, but the Transmission Owner 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 Owner shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.

### **2.3 Customer Options Meeting**

If the Transmission Owner determines the Interconnection Request cannot be approved without minor modifications at minimal cost; or a supplemental study or other additional studies or actions; or at significant cost to address safety, reliability, or power quality problems, within the five Business Day period after the determination, the Transmission Owner shall notify the Interconnection Customer and provide copies of all data and analyses underlying its conclusion. Within ten Business Days of the Transmission Owner's determination, the Transmission Owner shall offer to convene a customer options meeting with the Interconnection Customer 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 Owner's determination, or at the customer options meeting, the Transmission Owner shall:

- 2.3.1** Offer to perform facility modifications or minor modifications to the Transmission Owner'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 Owner's electric system; or
- 2.3.2** Offer to perform a supplemental review if the Transmission Owner concludes that the supplemental review might determine that the Small Generating Facility could continue to qualify for interconnection pursuant to the Fast Track Process, 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**

If the Interconnection Customer agrees to a supplemental review, the Interconnection Customer shall agree in writing within 15 Business Days of the offer, and submit a deposit for the estimated costs. The Interconnection Customer shall be responsible for the Transmission Owner'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 Owner will return such excess within 20 Business Days of the invoice without interest.

**2.4.1** Within ten Business Days following receipt of the deposit for a supplemental review, the Transmission Owner will determine if the Small Generating Facility can be interconnected safely and reliably.

**2.4.1.1** If so, the Transmission Owner shall forward an executable an interconnection agreement to the Interconnection Customer within five Business Days.

**2.4.1.2** If so, and Interconnection Customer facility modifications are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under these procedures, the Transmission Owner shall forward an executable interconnection agreement to the Interconnection Customer within five Business Days after confirmation that the Interconnection Customer has agreed to make the necessary changes at the Interconnection Customer's cost.

**2.4.1.3** If so, and minor modifications to the Transmission Owner's electric system are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under the Fast Track Process, the Transmission Owner shall forward an executable interconnection agreement to the Interconnection Customer within ten Business Days that requires the Interconnection Customer to pay the costs of such system modifications prior to interconnection.

**2.4.1.4** If not, the Interconnection Request will continue to be evaluated under the section 3 Study Process.

### **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 Owner's Transmission 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 Owner 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 Owner 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 Owner shall provide the Interconnection Customer, as soon as possible, but not later than five Business Days after the scoping meeting, a feasibility study agreement (Appendix 6) including an outline of the scope of the study and a nonbinding 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 Owner shall provide the Interconnection Customer, no later than five Business Days after the scoping meeting, a system impact study agreement (Appendix 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.

**3.3.4** If the feasibility study shows no potential for adverse system impacts, the Transmission Owner 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 Owner 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 Owner 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 Owner 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 Owner 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 Owner shall send the Interconnection Customer either a facilities study agreement (Appendix 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 public utility (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 Owner'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 Owner may contract with consultants to perform activities required under the facilities study agreement. The Interconnection Customer and the Transmission Owner 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 Owner, 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 Owner 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 Owner 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 Owner shall make reasonable efforts to meet all time frames provided in these procedures unless the Transmission Owner and the Interconnection Customer agree to a different schedule. If the Transmission Owner 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, a Party shall provide the other Parties 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, a 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 none of the Parties elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then a Party may exercise, whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

**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 Owner'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 Owner 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 another 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.

**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 Parties 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.

**4.5.2.1** Each Party shall employ at least the same standard of care to protect Confidential Information obtained from another 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 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 Parties to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Parties to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time any 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 Owner shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this document. The Transmission Owner 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 Owner, its subsidiaries or affiliates, or others.

**4.7 Record Retention**

The Transmission Owner 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 Owner, 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 Owner 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 Owner 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 Owner 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 Owner 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 Owner in all matters related to the conduct of studies and the determination of modifications to Affected Systems. An operator which may be an Affected System shall cooperate with the Transmission Owner 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 rated capacity of the Small Generating Facility.

## **APPENDIX 1 TO SGIP** **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 Appendix 5.

**Affected System** – An electric system other than the Transmission Owner's Transmission System that may be affected by the proposed interconnection.

**Business Day** – Monday through Friday, excluding Federal Holidays.

**Distribution System** – The Transmission Owner'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 Owner'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 no larger than 2 MW that includes the section 2 screens, customer options meeting, and optional supplemental review.

**Interconnection Customer** – Any entity, including the Transmission Owner or any of its affiliates or subsidiaries that proposes to interconnect its Small Generating Facility with the Transmission Owner's Transmission System.

**Interconnection Facilities** – The Transmission Owner'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 Owner'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 Owner'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 Owner's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Owner's Transmission System to accommodate the interconnection with the Small Generating Facility to the Transmission Owner's Transmission System. Network Upgrades do not include Distribution Upgrades.

**Party or Parties** – The Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** – The point where the Interconnection Facilities connect with the Transmission Owner'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 Owner.

**Reliability Coordinator** – The party charged with providing reliability coordination service for the Transmission Owner's system in accordance with the Amended Reliability Coordinator Agreement attached hereto as Attachment Q.

**Small Generating Facility** – The Interconnection Customer's device for the production 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** – LG&E/KU, the public utility operating companies which: (i) own the Transmission System; (ii) provide open access transmission service under the Tariff; (iii) receive payment for Transmission Service as provided for in the Tariff.

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

**Upgrades** – The required additions and modifications to the Transmission Owner's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.



**APPENDIX 2 TO SGIP**  
**SMALL GENERATOR INTERCONNECTION REQUEST**

**(Application Form)**

Transmission Owner:

\_\_\_\_\_

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.

**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 Owner.

**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 Owner 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 Owner]

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): \_\_\_\_\_  
I22t or K (Heating Time Constant): \_\_\_\_\_  
Rotor Resistance, Rr: \_\_\_\_\_  
Stator Resistance, Rs: \_\_\_\_\_  
Stator Reactance, Xs: \_\_\_\_\_  
Rotor Reactance, Xr: \_\_\_\_\_  
Magnetizing Reactance, Xm: \_\_\_\_\_  
Short Circuit Reactance, Xd'': \_\_\_\_\_  
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 Owner 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:

<b>Setpoint Function</b>	<b>Minimum</b>	<b>Maximum</b>
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

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: \_\_\_\_\_

**APPENDIX 3 TO SGIP**  
**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 Original Sheet No. 372



**APPENDIX 4 TO SGIP**  
**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 Appendix 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.

**APPENDIX 5 TO SGIP**  
**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 Owner.
- 2.0 The Transmission Owner acknowledges to the Customer receipt of the Application within three Business Days of receipt.
- 3.0 The Transmission Owner 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 Transmission Owner 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 Transmission Owner has 15 Business Days to complete this process. Unless the Transmission Owner determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the Transmission Owner approves the Application and returns it to the Customer. Note to Customer: Please check with the Transmission Owner before submitting the Application if disconnection equipment is required.
- 5.0 After installation, the Customer returns the Certificate of Completion to the Transmission Owner. Prior to parallel operation, the Transmission Owner 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 Transmission Owner notifies the Customer in writing that interconnection of the Small Generating Facility is authorized. If the witness test is not satisfactory, the Transmission Owner 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 Transmission Owner is obligated to complete this witness test within ten Business Days of the receipt of the Certificate of Completion. If the Transmission Owner 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 Transmission Owner, 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. 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): \_\_\_\_\_

**35.1.1 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 \_\_\_\_\_

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 Appendices 3 and 4 of the Small Generator Interconnection Procedures (SGIP), or the Transmission Owner 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 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 Transmission Owner 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.

Transmission Owner 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:

Contact (if different from Interconnection Customer)

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

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

License number: \_\_\_\_\_

Date Approval to Install Facility granted by the Transmission Owner: \_\_\_\_\_

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: \_\_\_\_\_

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 Owner 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 Transmission Owner'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 Transmission Owner 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 Transmission Owner, 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 Transmission Owner 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 Transmission Owner 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 Transmission Owner waives the right to inspect the Small Generating Facility.
- 2.4 The Transmission Owner 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 Transmission Owner 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 Transmission Owner shall provide reasonable notice to the Customer when possible prior to using its right of access.

### **5.0 Disconnection**

The Transmission Owner 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 Transmission Owner 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 each agree to maintain commercially reasonable amounts of insurance.

### **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 Transmission Owner.

### **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 Transmission Owner 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 Transmission Owner.

**APPENDIX 6 TO SGIP**  
**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 \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Transmission Owner"). Interconnection Customer and Transmission Owner 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 Owner's Transmission System; and

**WHEREAS**, Interconnection Customer has requested the Transmission Owner to perform a feasibility study to assess the feasibility of interconnecting the proposed Small Generating Facility with the Transmission Owner'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 Owner 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 Owner 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.

- 5.0 If the Interconnection Customer modifies its Interconnection Request, the time to complete the feasibility study may be extended by agreement of the Parties. In performing the study, the Transmission Owner 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-bonding 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 Owner's actual costs, including any costs incurred by Transmission Owner with performing its functions for the study, 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 Owner shall refund such excess within 30 calendar days of the invoice without interest.

**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 Owner]**

**[Insert name of Interconnection Customer]**

\_\_\_\_\_

\_\_\_\_\_

Signed: \_\_\_\_\_

Signed: \_\_\_\_\_

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 Owner.

**APPENDIX 7 TO SGIP**  
**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 Owner"). Interconnection Customer and Transmission Owner 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 Owner's Transmission System;

**WHEREAS**, the Transmission Owner 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 Owner to perform a system impact study(s) to assess the impact of interconnecting the Small Generating Facility with the Transmission Owner'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 Owner 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 Owner 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 Owner has 20 additional Business Days to complete a system impact study requiring review by Affected Systems.
- 8.0 If the Transmission Owner 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 Owner'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 Owner'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 Owner'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 Owner's actual costs, including any costs incurred by Transmission Owner with performing its functions for the study, 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 Owner shall refund such excess within 30 calendar days of the invoice without interest.

**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 Owner]**

**[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 Owner.

**APPENDIX 8 TO SGIP**  
**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 Owner"). Interconnection Customer and Transmission Owner 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 Owner's Transmission System;

**WHEREAS**, the Transmission Owner 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 Owner 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 Owner'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 Owner 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 Owner'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 Owner 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 facilities study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the facilities study must be completed and the facilities study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct a facilities study.
- 9.0 Any study fees shall be based on the Transmission Owner's actual costs, including any costs incurred by Transmission Owner with performing its functions for the study, and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.
- 10.0 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 Owner shall refund such excess within 30 calendar days of the invoice without interest.

**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 Owner]  
Customer]**

**[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 Owner station. Number of generation connections: \_\_\_\_\_

Will an alternate source of auxiliary power be available during CT/PT maintenance?  
Yes \_\_\_\_\_ No \_\_\_\_\_

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes \_\_\_\_\_ No \_\_\_\_\_  
(Please indicate on the one-line diagram).

What type of control system or PLC will be located at the Small Generating Facility?

---

---

What protocol does the control system or PLC use?

---

---

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

Physical dimensions of the proposed interconnection station:

---



Bus length from generation to interconnection station:

---

Line length from interconnection station to Transmission Owner'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 the Transmission Owner.

Is the Small Generating Facility located in Transmission Owner'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: \_\_\_\_\_

**APPENDIX 8 TO SGIP**  
**SMALL GENERATOR INTERCONNECTION AGREEMENT (SGIA)**

**(For Generating Facilities No Larger Than 20 MW)**

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This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by \_\_\_\_\_ ("Transmission Owner") and \_\_\_\_\_ ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

Transmission Owner Information

Transmission Owner: \_\_\_\_\_  
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 Appendix 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 Owner'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. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable Transmission Owner.
- 1.4** Nothing in this Agreement is intended to affect any other agreement between the Transmission Owner 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, in accordance with this Agreement, and with Good Utility Practice.
  - 1.5.3** The Transmission Owner 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 Owner or 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 Appendices 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 Owner and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Transmission Owner'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 Appendices to this Agreement.

**1.5.6** The Transmission Owner shall coordinate with all Affected Systems to support the interconnection.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, 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 system operator for the Transmission Owner's Transmission System and; 2) the Operating Requirements set forth in Appendix E of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Transmission Owner's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Appendices B and C 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** 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 Owner has established different requirements that apply to all similarly situated generators in the control area on a comparable basis. The requirements of this paragraph shall not apply to wind generators.

**1.8.2** The Transmission Owner 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 Owner requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1. In addition, if the Transmission Owner 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 Appendix A 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 Owner 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 Owner 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 Owner a written test report when such testing and inspection is completed.

**2.1.2** The Transmission Owner 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 Owner 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 Owner shall use Reasonable Efforts to list applicable parallel operation requirements in Appendix E of this Agreement. Additionally, the Transmission Owner shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Transmission Owner 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 Owner's Transmission System without prior written authorization of the Transmission Owner. The Transmission Owner will provide such authorization once it 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 Owner 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 Owner 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 Owner 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 Owner 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 Owner 20 Business Days written notice.

**3.3.2** Any 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 Owner's Transmission System. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

**3.3.4** This 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 Owner, 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 Owner'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 Reliability Coordinator may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Transmission Owner 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 Owner promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Transmission Owner's Transmission System or other 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 the Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

#### **3.4.2 Routine Maintenance, Construction, and Repair**

The Transmission Owner may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the Transmission Owner's Transmission System when necessary for routine maintenance, construction, and repairs on the Transmission Owner's Transmission System. The Transmission Owner shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Transmission Owner 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 Owner may suspend interconnection service to effect immediate repairs on the Transmission Owner's Transmission System. The Transmission Owner shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, Transmission Owner 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 Owner 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 Owner'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 Owner may disconnect the Small Generating Facility. The Transmission Owner 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 Owner 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 Owner'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 Owner'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 Appendix B of this Agreement. The Transmission Owner 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 Owner.

**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 Owner's Interconnection Facilities.

### **4.2 Distribution Upgrades**

The Transmission Owner shall design, procure, construct, install, and own the Distribution Upgrades described in Appendix F of this Agreement. If the Transmission Owner 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 Owner shall design, procure, construct, install, and own the Network Upgrades described in Appendix F of this Agreement. If the Transmission Owner 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 Owner 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 Owner 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 Owner'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 CFR § 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 Owner, and Affected System operator may adopt any alternative payment schedule that is mutually agreeable so long as the Transmission Owner and Affected System operator 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 Owner or Affected System operator 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 Owner 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 Owner provides, under this Agreement, for the repayment of amounts advanced to Affected System operator 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 transfer capability, 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 Owner 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 Owner's Interconnection Facilities and/or Upgrades described in the Appendices to this Agreement, the Transmission Owner 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 Owner for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Transmission Owner shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Transmission Owner within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Transmission Owner 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 Appendix D 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 Parties 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 Appendix D. A Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

### **6.3 Financial Security Arrangements**

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Transmission Owner's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Owner, 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 Owner 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 Owner's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Transmission Owner 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 Owner, 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 insured reasonably acceptable to the Transmission Owner 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** Any Party may assign this Agreement without the consent of the other Parties 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;
- 7.1.2** The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Transmission Owner, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Transmission Owner 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 another 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 a Party be liable to another 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 another 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 Parties, 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 Parties 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, a nondefaulting 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 Owner, except that the Interconnection Customer shall show proof of insurance to the Transmission Owner 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 Owner agrees to maintain general liability insurance or self-insurance consistent with the Transmission Owner's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Transmission Owner'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 another 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 another 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 another 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 another Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Parties to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time 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, any Party shall provide another 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 none of the Parties elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then any 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 Owner'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.

### **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 any 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 Owner. Any waiver of this Agreement shall, if requested, be provided in writing.

**12.5 Entire Agreement**

This Agreement, including all Appendices, 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, any 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 any Party. The Parties shall not have a 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 public utilities, 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 Parties, 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 Parties. 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 Parties 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 Parties 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 Parties 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 Owner 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 Owner 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 another 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 Owner:

Transmission Owner: \_\_\_\_\_

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 Owner: \_\_\_\_\_

Attention: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by a Party to the other Parties 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 Owner:

Transmission Owner: \_\_\_\_\_  
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 Owner:

Transmission Owner: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

**13.5 Changes to the Notice Information**

A 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 Owner

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

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

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



For the Interconnection Customer

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

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

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

## APPENDIX A TO SGIA

### Glossary of Terms

**Affected System** – An electric system other than the Transmission Owner'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 Owner'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 Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

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

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

**Interconnection Customer** – Any entity, including the Transmission Owner or any of its affiliates or subsidiaries that proposes to interconnect its Small Generating Facility with the Transmission Owner's Transmission System.

**Interconnection Facilities** – The Transmission Owner’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 Owner’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 Owner’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 Owner’s Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Transmission Owner’s Transmission System to accommodate the interconnection of the Small Generating Facility with the Transmission Owner’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, control area, or the Transmission Owner’s requirements, including those set forth in the Small Generator Interconnection Agreement.

**Party or Parties** – The Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** – The point where the Interconnection Facilities connect with the Transmission Owner’s Transmission System.

**Reasonable Efforts** – With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Reliability Coordinator** – The party charged with providing reliability coordination service for the Transmission Owner’s system in accordance with the Amended Reliability Coordinator Agreement attached hereto as Attachment Q.

**Small Generating Facility** – The Interconnection Customer’s device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer’s Interconnection Facilities.

**Tariff** – The Transmission Owner 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** – LG&E/KU, the public utility operating companies which: (i) own the Transmission System; (ii) provide open access transmission service under the Tariff; and (iii) receive payment for Transmission Service as provided for in the Tariff.

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

**Upgrades** – The required additions and modifications to the Transmission Owner's Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

## **APPENDIX B 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 or the Transmission Owner. The Transmission Owner 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.

## **APPENDIX C TO SGIA**

### **One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment, and Upgrades**

## APPENDIX D TO SGIA

### Milestones

In-Service Date: \_\_\_\_\_

Critical milestones and responsibility as agreed to by the Parties:

	Milestone/Date	Responsible Party
(1)	_____	_____
(2)	_____	_____
(3)	_____	_____
(4)	_____	_____
(5)	_____	_____
(6)	_____	_____
(7)	_____	_____
(8)	_____	_____
(9)	_____	_____
(10)	_____	_____

Agreed to by:

For the Transmission Owner \_\_\_\_\_ Date \_\_\_\_\_

For the Interconnection Customer \_\_\_\_\_ Date \_\_\_\_\_

## **APPENDIX E TO SGIA**

### **Additional Operating Requirements for the Transmission Owner's Transmission System and Affected Systems Needed to Support the Interconnection Customer's Needs**

The Transmission Owner shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the Transmission Owner's Transmission System.



## **APPENDIX F TO SGIA**

### **Transmission Owner's Description of its Upgrades and Best Estimate of Upgrade Costs**

The Transmission Owner 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 Owner shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.

## ATTACHMENT O RATE FORMULAE FOR NETWORK INTEGRATION TRANSMISSION SERVICE

### Transmission Owner Formulaic Rates Description

Transmission Owner will devise rates based on the attached Rate Formula Template on or before May 1 of each year based on data for the previous year.

Rate Formula Template		For the 12 months ended 12/31/ Utilizing FERC Form 1 Data		LG&E Energy LLC		Allocated Amount
Line No.				Total	Allocation	
1	GROSS REVENUE REQUIREMENT (page 3, line 25)					\$ 0
	REVENUE CREDITS (Note Y)					
2	Account No. 454 (page 4, line 34)		0	0	0.00000	0
3	Account No. 452 (page 4, line 37)		0	0	0.00000	0
4	Revenues from Gas/Flashed Interzonal Transactions		0	0	0.00000	0
5	Revenues from service provided by LG&E Energy LLC at a discount		0	0	0.00000	0
6	TOTAL REVENUE CREDITS (sum lines 2-5)					0
7	NET REVENUE REQUIREMENT (line 1 minus line 6)					\$ 0
	DIVISOR					
8	Average of 12 smallest system peaks for requirements (RQ) service (Note A)					0
9	Plus 12 CP of firm based sales over one year not in line 8 (Note B)					0
10	Plus 12 CP of Network Load not in line 8 (Note C)					0
11	Less 12 CP of firm P-T-P over one year (enter negative) (Note D)					0
12	Plus Contract Demand of firm P-T-P over one year					0
13	(RESERVED)					0
14	Less Contract Demand from service over one year provided by LG&E ENERGY LLC at a discount (enter negative)					0
15	Divisor (sum lines 8-14)					0
16	Annual Cost (\$/KWYr) (line 7 / line 15)		0.000			
17	Network Rate (\$/W/M (line 16 / 12)		0.000			
18	(RESERVED)					
19	(RESERVED)					
20	(RESERVED)					
21	FERC Annual Charges(\$/MWH) (Note E)		\$0.000	Short Term		\$0.000 Short Term
22			\$0.000	Long Term		\$0.000 Long Term

Formula Rate - Non-Levitated		Rate Formula Template Utilizing FERC Form 1 Data		For the 12 months ended 12/31/		
(1)		(2)		(3)	(4)	(5)
E.ON Energy LLC		E.ON Energy LLC		E.ON Energy LLC		
Form No. 1 Page, Line, Col.		Compare Total	Allocation	Transmission (Col 3 times Col 4)		
Line No.						
<b>RATE BASE:</b>						
<b>GROSS PLANT IN SERVICE</b>						
1	Production	226.46 g	0	NA		0
2	Transmission	226.58 g	0	TP	0.00000	0
3	Distribution	226.75 g	0	NA		0
4	General & Intangible	226.52 & 95 g	0	WOS	0.00000	0
5	Common	356.1	0	CB	0.00000	0
6	<b>TOTAL GROSS PLANT (sum lines 1-5)</b>		0	<b>GPW</b>	<b>0.00000</b>	<b>0</b>
<b>ACCUMULATED DEPRECIATION</b>						
7	Production	219.20-24.2	0	NA		0
8	Transmission	219.25 e	0	TP	0.00000	0
9	Distribution	219.26 e	0	NA		0
10	General & Intangible	219.27 e	0	WOS	0.00000	0
11	Common	356.1	0	CB	0.00000	0
12	<b>TOTAL ACCUM. DEPRECIATION (sum lines 7-11)</b>		0			<b>0</b>
<b>NET PLANT IN SERVICE</b>						
13	Production	(line 1-line 7)	0			0
14	Transmission	(line 2-line 8)	0			0
15	Distribution	(line 3-line 9)	0			0
16	General & Intangible	(line 4-line 10)	0			0
17	Common	(line 5-line 11)	0			0
18	<b>TOTAL NET PLANT (sum lines 13-17)</b>		0	<b>NPW</b>	<b>0.00000</b>	<b>0</b>
<b>ADJUSTMENTS TO RATE BASE (Note P)</b>						
19	Account No. 281 (enter negative)	273.30	0	NA	zero	0
20	Account No. 282 (enter negative)	275.2 k	0	NP	0.00000	0
21	Account No. 283 (enter negative)	277.30	0	NP	0.00000	0
22	Account No. 190	234.8 c	0	NP	0.00000	0
23	Account No. 255 (enter negative)	267.8 b	0	NP	0.00000	0
23a	Network Upgrade (enter negative)		0	TP	0.00000	0
24	<b>TOTAL ADJUSTMENTS (sum lines 19-23)</b>		0			<b>0</b>
25	<b>LAND HELD FOR FUTURE USE 216d (Note G)</b>		0	TP	0.00000	0
<b>WORKING CAPITAL (Note H)</b>						
26	CWC	calculated	0			0
27	Materials & Supplies (Note G)	227.8 c & 13.2	0	TP	0.00000	0
28	Prepayments (Account 165)	119.4 b d	0	GP	0.00000	0
29	<b>TOTAL WORKING CAPITAL (sum lines 26- 28)</b>		0			<b>0</b>
30	<b>RATE BASE (sum lines 18, 24, 25, &amp; 29)</b>		0			<b>0</b>

Formula Rate-Non-Levelized	Rate Formula Template Utilizing FERC Form 1 Data		For the 12 months ended 12/31/	
	(1)	(2)	(3)	(5)
Line No.	LG&E Energy LLC Form No. 1 Page, Line, Col.	Company Total	Allocation	Transmission (Col. 3 times Col. 4)
<b>O&amp;M</b>				
1	Transmission	321,100.0	0 TE	0.0000
2	Loss Account MS	321,881.0	0	1.0000
3	AMG	323,163.0	0 WS	0.0000
4	Loss FERC Annual Post		0 WS	0.0000
5	Loss EPRI & Reg. Comm. Exp. & Non-safety Ad (Note 1)		0 WS	0.0000
6a	Plus Transmission Related to Reg. Comm. Exp. (Note 1)		0 TE	0.0000
6	Consent	355.1	0 CE	0.0000
7	Transmission Lease Payments		0	1.0000
8	<b>TOTAL O&amp;M (sum lines 1, 3, 5a, 6, 7 less lines 2, 4, 5)</b>			
<b>DEPRECIATION EXPENSE</b>				
9	Transmission	336.7.0	0 TP	0.0000
10	General	338.9.0	0 WS	0.0000
11	Consent	336.10.0	0 CE	0.0000
12	<b>TOTAL DEPRECIATION (Sum lines 9-11)</b>			
<b>TAXES OTHER THAN INCOME TAXES (Note 1)</b>				
<b>LABOR RELATED</b>				
13	Payroll	283.1	0 WS	0.0000
14	Highway and vehicle	283.1	0 WS	0.0000
<b>PLANT RELATED</b>				
16	Property	283.1	0 CP	0.0000
17	Gross Receipts	283.1	0 NA	zero
18	Other	283.1	0 CP	0.0000
19	Payments in lieu of taxes		0 CP	0.0000
20	<b>TOTAL OTHER TAXES (sum lines 13-19)</b>			
<b>INCOME TAXES (Note 2)</b>				
21	$T = 1 - ((1-SIT) * (1-PT)) / (1-SIT * PT * p) =$		0.0284	
22	$CT = (T(1-p) * (1-WCLTDAR)) =$ where WCLTD=(page 4, line 27) and $R =$ (page 4, line 30) and PT, SIT & p are as given in footnote K		0.0285	
23	$S(1-T) =$ (from line 21)		0.0023	
24	Amortized Investment Tax Credit (26.6.3) (enter negative)		0	
25	Income Tax Calculation= line 22 * line 28		0 NA	
26	ITC adjustment (line 23 * line 24)		0 NP	0.0000
27	<b>Total income taxes</b> (line 25 plus line 26)			
28	<b>RETURN</b>			
29	[Rate Base (page 2, line 32) * Rate of Return (page 4, line 30)]			
30	<b>REV. REQUIREMENT (sum lines 8, 12, 20, 27, 28)</b>			

Formula Rate- Non-Licensed		Rate Formula Template Utilizing FERC Form 1 Data		For the 12 months ended 12/31/	
LG&E Energy LLC SUPPORTING CALCULATIONS AND NOTES					
<b>TRANSMISSION PLANT INCLUDED IN LG&amp;E ENERGY LLC RATES</b>					
1	Total transmission plant (page 2, line 2, column 3)				0
2	Less transmission plant excluded from LG&E ENERGY LLC rates (Note M)				0
3	Less transmission plant included as OATY Ancillary Services (Note N)				0
4	Transmission plant included in LG&E ENERGY LLC rates (line 1 less lines 2 & 3)				0
5	Percentage of transmission plant included in LG&E ENERGY LLC Rates (line 4 divided by line 1)	TP%			0.0000
<b>TRANSMISSION EXPENSES</b>					
6	Total transmission expenses (page 3, line 1, column 3)				0
7	Less transmission expenses included as OATY Ancillary Services (Note L)				0
8	Included transmission expenses (line 6 less line 7)				0
9	Percentage of transmission expenses after adjustment (line 8 divided by line 6)				0.0000
10	Percentage of transmission plant included in LG&E ENERGY LLC Rates (line 5)	TP			0.0000
11	Percentage of transmission expenses included in LG&E ENERGY LLC Rates (line 9 times line 10)	TP%			0.0000
<b>WAGE &amp; SALARY ALLOCATOR (W&amp;S)</b>					
		Form 1 Reference	\$	%	Allocation
12	Production	854.18 h	0	0.00	
13	Transmission	854.19 h	0	0.00	
14	Distribution	854.20 h	0	0.00	
15	Other	854.21, 22, 23 h	0	0.00	
16	Total (sum lines 12-15)		0	0	0.0000 = WS
<b>COMMON PLANT ALLOCATOR (CP) (Note O)</b>					
			\$	% Expense	W&S Allocator
17	Electric	201.3 a	0		(line 16)
18	Gas	201.3 b	0	0.02106	0.0000
19	Water	201.3 c	0		= 0.00000
20	Total (sum lines 17-19)		0		
<b>RETURN (R)</b>					
21a	Long Term Interest (11%, sum of 58c through 63c)				\$ 0
22	Preferred Dividends (118.29c) (positive number)				\$ 0
<b>Development of Common Stock</b>					
23	Proprietary Capital (112.1 3d)				0
24	Less Preferred Stock (line 22)				0
25	Less Accrued 216.1 (112.12d) (either negative)				0
26	Common Stock (sum of lines 23-25)				0
			\$	%	Weighted
27	Long Term Debt (112, sum of 11N through 20d)		0	0%	0.0000
28	Preferred Stock (112.3d)		0	0%	0.0000
29	Common Stock (line 26)		0	0%	0.0000
30	Total (sum lines 27-29)		0		0.0000 = WCLTD
<b>REVENUE CREDITS</b>					
					Less
<b>ACCOUNT 447 (SALES FOR RESALE) (312-311) (Note G)</b>					
31	a. Bundling Non-FQ Sales for Resale (3115d)				0
32	b. Bundling Sales for Resale included in Divisor on page 1				0
33	Total of (a)-(b)				0
34	ACCOUNT 454 (GENT FROM ELECTRIC PROPERTY) (Note H)				\$0
<b>ACCOUNT 456 (OTHER ELECTRIC REVENUES) (308b)</b>					
35	a. Transmission charges for all transmission transaction				\$0
36	b. Transmission charges for all transmission included in Divisor on Page 1				\$0
37	Total of (a)-(b)				\$0

**ATTACHMENT O**  
**RATE FORMULAE FOR POINT TO POINT TRANSMISSION SERVICE**

**Transmission Owner Formulaic Rates**  
**Description**

Transmission Owner will devise rates based on the attached Rate Formula Template on or before May 1 of each year based on data for the previous year.

**ATTACHMENT P**  
**RESERVED**

**ATTACHMENT Q**  
**AGREEMENT BETWEEN THE TRANSMISSION OWNER AND RELIABILITY**  
**COORDINATOR**



**AMENDED RELIABILITY COORDINATOR AGREEMENT**

**BETWEEN**

**LOUISVILLE GAS AND ELECTRIC COMPANY  
AND KENTUCKY UTILITIES COMPANY**

**AND**

**TENNESSEE VALLEY AUTHORITY**

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**Attachment A – Description of Primary Functions**

**Attachment B – [Reserved]**

**Attachment C – List of Key Personnel**

**Exhibit 1 – Joint Reliability Coordination Agreement and Congestion Management Process**

## **RELIABILITY COORDINATOR AGREEMENT**

This Amended Reliability Coordinator Agreement (this “Amended Agreement”), including all appendices, exhibits, and attachments, appended hereto, is entered into this \_\_\_\_ day of July, 2006 (“Execution Date”), between Louisville Gas and Electric Company and Kentucky Utilities Company, corporations organized pursuant to the laws of the State of Kentucky (collectively, “LG&E/KU” or “Transmission Owner”), and the Tennessee Valley Authority, a federal government corporation (“TVA” and, in its capacity as reliability coordinator pursuant to this Agreement, the “Reliability Coordinator”) created by and existing under and by virtue of the Tennessee Valley Authority Act of 1933, as amended, 16 U.S.C. §§ 831 *et seq.* (the “TVA Act”). LG&E/KU and the Reliability Coordinator may sometimes be referred to herein individually as a “Party” and collectively as the “Parties.”

### **RECITALS**

WHEREAS, LG&E/KU owns, among other things, an integrated electric transmission system (“Transmission System”), over which the Midwest Independent Transmission System Operator Inc. (the “Midwest ISO”) currently provides open access transmission service to customers in the LG&E/KU Control Area (as defined in Section 1.6 of LG&E/KU’s Open Access Transmission Tariff, filed with the Federal Energy Regulatory Commission (“FERC”) on October 7, 2005 (the “OATT”));

WHEREAS, as part of LG&E/KU’s proposal to withdraw its participation in the Midwest ISO, LG&E/KU desires to provide non-discriminatory open access transmission service pursuant to the OATT;

WHEREAS, LG&E/KU desires to have the Reliability Coordinator perform certain key reliability functions under the OATT, including: (i) reliability coordination (as defined in the relevant North American Electric Reliability Council (“NERC”) Standards); (ii) transmission planning and regional coordination; (iii) approving LG&E/KU’ maintenance schedules; (iv) identifying upgrades required to maintain reliability; (v) non-binding recommendations relating to economic transmission system upgrades; and (vi) administration of any seams agreements;

WHEREAS, LG&E/KU desires to have the Reliability Coordinator perform all functions identified for reliability coordinators in NERC’s Standards;

WHEREAS, LG&E/KU will retain all remaining NERC obligations, including obligations associated with its status as a Control Area (including operations as a Balancing Authority and Transmission Operator as defined by NERC) and its obligations to ensure the provision of transmission services under the OATT, and will take action necessary to protect reliability of the Transmission System, including circumstances where such action is necessary to protect, prevent or manage emergency situations;

WHEREAS, the Reliability Coordinator is: (i) a federal government corporation charged with providing electric power, flood control, navigational control, agricultural and industrial development, and other services to a region including Tennessee and parts of six contiguous states; and (ii) recognized by NERC as a reliability coordinator;

WHEREAS, the Reliability Coordinator is independent from LG&E/KU, possesses the necessary competence and experience to perform the functions provided for hereunder and is willing to perform such functions under the terms and conditions agreed upon by the Parties as set forth in this Agreement;

WHEREAS, TVA, the Midwest ISO and PJM Interconnection, L.L.C. have entered into that certain Joint Reliability Coordination Agreement, dated as of April 22, 2005 (as may be amended from time to time, "JRCA"), a copy of which is attached hereto as Exhibit 1, which provides for the exchange of transmission-related data and information and establishes various arrangements and protocols in furtherance of the reliability of their interconnected transmission systems and efficient market operations, and LG&E/KU seeks to ensure the full participation of the LG&E/KU Transmission System in the arrangements and protocols included in the JRCA and Congestion Management Plan ("CMP") provided for therein;

WHEREAS, this Agreement provides for the performance of certain of these arrangements and protocols under the JRCA by TVA in its capacity as Reliability Coordinator for the LG&E/KU Transmission System; and

WHEREAS, TVA and LG&E/KU may choose to participate in similar reliability coordination agreements with other neighboring reliability coordination areas.

NOW THEREFORE, in consideration of the mutual promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

**Section 1 - Designation; Scope of Functions; Standards of Performance; Reliability Coordination Advisory Committee.**

1.1 Designation. LG&E/KU appoints TVA to act as LG&E/KU's designated Reliability Coordinator pursuant to and in accordance with the terms and conditions of this Agreement. The Reliability Coordinator shall have no responsibility to LG&E/KU, except as specifically set forth in this Agreement.

1.2 Scope of Functions. The Reliability Coordinator shall perform the functions assigned to it and described in Attachment A (the "Functions") seven days a week, twenty-four hours a day, for the duration of the Term in accordance with the terms and conditions of this Agreement. In accordance with its obligations under this Section 1.2, the Reliability Coordinator is authorized to, and shall, direct and coordinate timely and appropriate actions by LG&E/KU, including curtailing transmission service or energy schedules, redispatching generation, and shedding load, in each case, in order to avoid adverse effects on interregional bulk power reliability.

1.2.1 Relationship Between this Agreement and Attachment K to LG&E/KU's OATT. The Parties recognize that the relationship between LG&E/KU and the Reliability Coordinator and the Functions to be performed by the Reliability Coordinator must be reflected in LG&E/KU's OATT. The Reliability Coordinator relationship and the Functions assigned to the Reliability Coordinator under Attachment A to this Agreement shall be reflected in Attachment K to LG&E/KU's OATT. To the extent that there is a conflict between Attachment A to this Agreement and Attachment K to LG&E/KU's OATT, Attachment K to LG&E/KU's OATT shall govern. Any changes proposed by LG&E/KU to FERC in Attachment k in LG&E/KU's OATT, regarding the Functions or

any other provisions that concern the Reliability Coordinator shall reflect the mutual agreement of the Parties. Notwithstanding this Section 1.2.1, nothing in this Agreement or Attachment K to LG&E/KU's OATT shall grant FERC any additional jurisdiction over TVA.

1.3 Reliability Coordinator Procedures. The Reliability Coordinator shall develop the procedures and guidelines by which it will perform the Functions (the "Reliability Coordinator Procedures") in coordination with the RCAC (as defined in Section 1.10) and applicable regional reliability councils. The Reliability Coordinator Procedures shall be documented in a NERC-approved reliability plan for the TVA Reliability Coordination Area or in TVA Standard Procedures and Policies. The Reliability Coordinator shall provide LG&E/KU advance written notice of any amendment or change to the Reliability Coordinator Procedures. For purposes of this Agreement, the term "TVA Standard Procedures and Policies" shall mean such procedures and policies related to TVA's operations as may be promulgated and published by TVA pursuant to its legal authorities and obligations.

1.4 Threat to Reliability. If the Reliability Coordinator determines that an actual or potential threat to transmission system reliability exists, and that such threat may impair the reliability of a transmission system, then the Reliability Coordinator shall direct that LG&E/KU take whatever actions are necessary, consistent with Good Utility Practice (as defined below) and in accordance with the applicable reliability criteria, policies, standards, rules, regulations and other requirements of NERC (collectively, the "NERC Standards") and any applicable regional reliability councils or their successors (collectively, "Regional Reliability Council Standards"), to avoid or mitigate the effects of the threat to transmission system reliability. For purposes of this Agreement, "Good Utility Practice" shall mean 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 that, in a person's exercise of reasonable judgment in light of the facts as known to that person 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 include the range of acceptable practices, methods, or acts generally accepted in the region.

1.5 Reliability Coordinator Directives. Except as provided in the immediately succeeding sentence, LG&E/KU shall implement any directive given by the Reliability Coordinator pursuant to Sections 1.2 or 1.4. LG&E/KU shall not be obligated to implement any directive which LG&E/KU determines will violate any state or federal law or the terms of any governmental approval applicable to LG&E/KU. LG&E/KU may review any directive given by the Reliability Coordinator pursuant to Sections 1.2 or 1.4, to determine if it is, in LG&E/KU's judgment, in accordance with the requirements of Section 1.8. If LG&E/KU determines that any directive is not in accordance with the requirements of Section 1.8, then it shall immediately so notify the Reliability Coordinator; provided, however, that, except as provided in the second sentence in this Section 1.5, LG&E/KU shall continue to implement the directive until the Reliability Coordinator notifies LG&E/KU otherwise. LG&E/KU's notice shall include: (a) information outlining the basis for LG&E/KU's determination that (i) the directive is not in accordance with the requirements of Section 1.8 and, if applicable, (ii) that implementation of the directive will violate one or more state or federal laws or the terms of any governmental approvals applicable to LG&E/KU; and (b) the alternative action that LG&E/KU would prefer to

take to alleviate the problem addressed by the Reliability Coordinator's directive. After prompt consideration of such information, the Reliability Coordinator shall issue a directive to LG&E/KU in accordance with its obligations under this Agreement and LG&E/KU will, subject to the second sentence in this Section 1.5, act in accordance with such directive.

1.6 [Reserved.]

1.7 Expansion. Nothing in this Agreement is intended to prevent TVA from (a) coordinating, or cooperating in, interregional activities to relieve problems experienced by other transmission systems or (b) entering into other agreements with one or more third party transmission providers or operators to perform functions for such transmission providers or operators that are the same or similar to the Functions performed hereunder; provided, however, that it does not breach any of its obligations under this Agreement (including its obligations with respect to Confidential Information in Section 10) by entering into or performing any of its obligations under such other agreements; provided, further, that (i) any such other agreements shall provide for LG&E/KU to be reimbursed in an equitable manner for any capital expenditures made pursuant to this Agreement as well as for LG&E/KU's ongoing operations and maintenance expenditures to the extent such capital expenditures and operations and maintenance expenditures are used by the Reliability Coordinator in performing functions under such other agreements, (ii) LG&E/KU agrees to reimburse any such third party transmission providers or operators in an equitable manner for any capital expenditures made by such third parties as well as for such third parties' ongoing operations and maintenance expenditures to the extent such capital expenditures and operations and maintenance expenditures are used by the Reliability Coordinator in performing functions under this Agreement, and (iii) to the extent applicable, the Reliability Coordinator shall revise the compensation provided for in Section 3.1 in accordance with the terms therein.

1.8 Reliability Coordinator's Standard of Performance. The Reliability Coordinator shall perform its obligations under this Agreement in accordance with: (a) Good Utility Practice; (b) the NERC Standards and Regional Reliability Council Standards; (c) LG&E/KU's specific reliability requirements and operating guidelines (to the extent these are not inconsistent with other requirements specified in this Section 1.8); (d) TVA Standard Procedures and Policies; and, (e) all state and federal laws, including the TVA Act, and the terms of governmental approvals applicable to one or both of the Parties. In performing its responsibilities under this Agreement, the Reliability Coordinator shall not discriminate against similarly situated persons.

1.9 LG&E/KU's Standard of Performance. LG&E/KU shall perform its obligations under this Agreement in accordance with: (a) Good Utility Practice; (b) the NERC Standards and Regional Reliability Council Standards; (c) any other LG&E/KU-specific reliability requirements and operating guidelines (to the extent these are not inconsistent with other requirements specified in this Section 1.9); and (d) all state and federal laws and the terms of governmental approvals applicable to LG&E/KU.

1.10 Reliability Coordination Advisory Committee.

1.10.1 Each Party shall designate one representative to serve on a Reliability Coordination Advisory Committee ("RCAC"), which shall be composed of representatives of each Party and representatives from each entity that has executed a similar reliability coordination agreement designating TVA as its reliability coordinator. Each Party may also designate one alternate to act in the absence of its representative on



the RCAC. Written notice of each representative and alternate appointment shall be provided to each RCAC entity, and each Party may change its representatives upon written notice to the other RCAC entities.

1.10.2 The RCAC shall assist the Reliability Coordinator in the development of the initial Reliability Coordinator Procedures and the modification of existing Reliability Coordinator Procedures. In connection with these activities, the Reliability Coordinator may provide the other RCAC members with access to necessary data and documents maintained by the Reliability Coordinator, provided that each such RCAC member has signed the NERC Data Confidentiality Agreement and that all Confidential Information is treated as transmission operations and transmission system information pursuant to the NERC Data Confidentiality Agreement.

The RCAC shall meet at least twice per Contract Year (as defined below). For purposes of this Agreement, a "Contract Year" shall consist of a twelve (12) month period. "Contract Year 1" shall begin on the Effective Date. Contract Years 2, 3, and 4 shall consist of the next three successive 12-month periods after Contract Year 1.

## **Section 2 - Independence.**

2.1 Key Personnel. All Functions shall be performed by employees of the Reliability Coordinator identified in Attachment C (the "Key Personnel"). No Key Personnel shall also be employed by LG&E/KU or any of its Affiliates (as defined in 18 C.F.R. § 35.34(b)(3) of FERC's regulations). The Reliability Coordinator and the Key Personnel shall be, and shall remain throughout the Term, Independent (as defined below) of LG&E/KU and its Affiliates. For purposes of this Agreement: "Independent" shall mean that the Reliability Coordinator and the Key Personnel are not subject to the control of LG&E/KU or its Affiliates, and have full decision-making authority to perform all Functions in accordance with the provisions of this Agreement. Any Key Personnel owning securities in LG&E/KU or its Affiliates shall divest such securities within six (6) months of first being assigned to perform such Functions, provided that nothing in this Section 2.1 shall be interpreted or construed to preclude any such Key Personnel from indirectly owning securities issued by LG&E/KU or its Affiliates through a mutual fund or similar arrangement (other than a fund or arrangement specifically targeted toward the electric industry or the electric utility industry or any segment thereof) under which the Key Personnel does not control the purchase or sale of such securities. Participation by any Key Personnel in a pension plan of LG&E/KU or its Affiliates shall not be deemed to be a direct financial interest if the plan is a defined-benefit plan that does not involve the Key Personnel's ownership of the securities. For the avoidance of doubt, LG&E/KU shall not have an approval or consent right with respect to the selection of any Key Personnel.

2.2 Standards of Conduct Treatment. All Key Personnel shall be treated, for purposes of FERC's Standards of Conduct, as transmission employees. All restrictions relating to information sharing and other relationships between merchant employees and transmission employees shall apply to the Key Personnel.

## **Section 3 - Compensation, Billing and Payment.**

3.1 Compensation. LG&E/KU shall pay to the Reliability Coordinator as compensation for the performance of the Functions during the Initial Term the following amounts on or before the start of each Contract Year:

<b>Contract Year 1</b>	<b>\$1,397,000</b>
<b>Contract Year 2</b>	<b>\$1,439,000</b>
<b>Contract Year 3</b>	<b>\$1,511,000</b>
<b>Contract Year 4</b>	<b>\$1,586,000</b>

The Reliability Coordinator agrees that if at any time during the Initial Term it expands its Reliability Coordination Area by providing similar services to additional Transmission Operators, the Reliability Coordinator will review and revise, as appropriate, the above compensation rate. Such revised compensation shall enable the Reliability Coordinator to recover its incremental costs associated with providing the specific service by allocating the costs among those subscribing to the service in an equitable manner ( e.g., costs may be allocated using a load ratio share methodology (a participant's annual non-coincident peak load as a percentage of the total annual non-coincident peak load for those participating in the service)). Costs will be determined by the Reliability Coordinator based on its total cost of providing the service(s) as documented in the Reliability Coordinator's financial systems.

Compensation for Subsequent Terms (as defined in Section 4.2 herein) shall be based on the compensation in previous Contract Years and/or the methodology outlined above in this Section 3.1 and shall be negotiated by the Parties in good faith. Such negotiations shall begin not later than six months prior to and shall be concluded no later than three months prior to the beginning of the Subsequent Term.

Notwithstanding any provision to the contrary contained in this Agreement, if a Dispute should occur between the Parties with respect to the amount of compensation to be paid by LG&E/KU to the Reliability Coordinator (i) pursuant to this Sections 3.1 or (ii) in respect of additional services (other than the Functions) requested by LG&E/KU that the Reliability Coordinator elects, in its sole discretion, to provide, then, in each case, LG&E/KU shall file notice thereof with the FERC. The Parties acknowledge that any FERC order issued with respect to such a dispute is only binding on LG&E/KU, not TVA.

3.2 Compensation After Termination. If LG&E/KU terminates this Agreement before the end of a Contract Year, then the Reliability Coordinator shall not be obligated to refund any amounts paid by LG&E/KU to the Reliability Coordinator as compensation for services provided by the Reliability Coordinator under this Agreement. If, however, the Reliability Coordinator terminates this Agreement before the end of a Contract Year or LG&E/KU and the Reliability Coordinator mutually agree to terminate this Agreement, then the Reliability Coordinator shall be obligated to refund to LG&E/KU an amount equal to the product of (a) any amounts paid by LG&E/KU to the Reliability Coordinator as compensation for services provided by the Reliability Coordinator under this Agreement during the Contract Year in which this Agreement is terminated and (b) the number of whole or partial months remaining in the Contract Year divided by twelve (12).

3.3 Reimbursement of Fees. In addition to the compensation provided for in Section 3.1, LG&E/KU shall reimburse the Reliability Coordinator for (a) its share of costs associated with the Reliability Coordinator's membership in the Reliability First Corporation or otherwise required by the Reliability First Corporation in order for the Reliability Coordinator to be LG&E/KU's reliability coordinator, including annual membership assessments and (b) any

additional costs incurred by the Reliability Coordinator at the request or direction of LG&E/KU that are not associated with services provided for in Section 3.1.

3.4 Payments. All payments by LG&E/KU to the Reliability Coordinator shall be made by the FedWire transfer method to the Reliability Coordinator's account at the U.S. Treasury in accordance with the wire instructions indicated below, and all such payments shall be deemed received as of the date the electronic funds transfer to the Reliability Coordinator's account is deemed effective.

Bank Name: TREAS NYC (official abbreviation)

Bank Address: New York Federal Reserve Bank, New York City

ABA Number: 021030004

Account No: 4912

OBI: Provide your organization name and invoice number or explanation of payment.

The Reliability Coordinator shall provide LG&E/KU with one or more contact persons for payment purposes and shall update such list of contact persons as necessary.

**Section 4 - Effective Date; Term; Termination; Termination Fees; Transition Assistance Services.**

4.1 Effective Date. The Parties acknowledge and agree that:

4.1.1 Sections 4, 6, 7, 8, 9, 10, 11, 13, 15, 16 and 17 shall be effective, and the rights and obligations of the Parties under Sections 4, 6, 7, 8, 9, 10, 11, 13, 15, 16 and 17, shall be binding upon the Parties, in each case, as of the Execution Date; and

4.1.2 All other Sections of this Agreement (other than Sections 4, 6, 7, 8, 9, 10, 11, 13, 15, 16 and 17) shall be effective, and the rights and obligations of the Parties under all other Sections of this Agreement (other than Sections 4, 6, 7, 8, 9, 10, 11, 13, 15, 16 and 17) shall be binding upon the Parties, as of the date (the "Effective Date") on which the Parties shall have agreed in writing that each of the following conditions precedent have been satisfied to their mutual satisfaction:

(a) The Parties' representations and warranties in Section 17.7 shall be true and correct in all material respects as of the Effective Date;

(b) FERC shall have issued an order accepting for filing LG&E/KU's application to FERC in Docket Nos. ER06-20-000 and EC06-4-000 dated October 7, 2005;

(c) LG&E/KU shall have acquired operational control of the Transmission System; and

(d) The Parties shall be prepared and capable to commence their respective obligations under this Agreement, provided that the Parties shall use commercially reasonable efforts to be prepared and capable to commence their

respective obligations under this Agreement as soon as practicable after the Execution Date.

4.2 Term. The initial term of this Agreement shall commence on the Execution Date and continue for four (4) years from the Effective Date (as provided for in Section 4.1), unless terminated early pursuant to the termination provisions hereof (the “Initial Term”). After the conclusion of the Initial Term, this Agreement shall automatically continue for successive additional one-year terms (each, a “Subsequent Term”) unless and until terminated pursuant to the termination provisions hereof. The Initial Term and any Subsequent Terms, together with the Transition Assistance Period, if any, shall collectively be referred to as the “Term.”

4.3 Mutually-Agreed Termination. This Agreement may be terminated by mutual agreement of the Parties at any time during the Term.

4.4 Termination at End of Term. Either Party may terminate this Agreement at the end of the Initial Term or any Subsequent Term upon six (6) months’ prior written notice to the other Party.

4.5 Termination for Cause.

4.5.1 Termination by Either Party. Either Party may terminate this Agreement effective immediately upon thirty (30) days’ prior written notice thereof to the other Party if:

(a) Material Failure or Default. The other Party fails to comply with, observe or perform, or defaults, in any material respect, in the performance of the terms and conditions of this Agreement, and such failure or default remains uncured for thirty (30) days after notice thereof, provided that such failure or default is susceptible to cure and the other Party is exercising reasonable diligence to cure such failure or default;

(b) Pattern of Failure. It determines, in its sole discretion, that there has been a pattern of failure by the other Party to comply with the standards of performance required under this Agreement;

(c) Gross Negligence, Willful Misconduct or Fraud. The other Party commits gross negligence, willful misconduct or fraud in the performance of its obligations under this Agreement;

(d) Material Misrepresentation. Any representation made by the other Party hereunder shall be false or incorrect in any material respect when made and such misrepresentation is not cured within thirty (30) days of such discovery or is incapable of cure;

(e) Bankruptcy. The other Party: (i) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it; (ii) makes an assignment or any general arrangement for the benefit of creditors; (iii) otherwise becomes bankrupt or insolvent (however evidenced); (iv) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any

substantial portion of its property or assets; or (v) is generally unable to pay its debts as they fall due;

(f) Dissolution. The other Party dissolves or is dissolved or its legal existence is otherwise terminated;

(g) Failure to Negotiate Amendment. The Parties are unsuccessful in negotiating an amendment or amendments to this Agreement pursuant to Section 17.6;

(h) Regulatory Changes/Modifications. FERC, in accepting for filing LG&E/KU's application to FERC in Docket Nos. ER06-20-000 and EC06-4-000 dated October 7, 2005, or in any other future docket, makes any material changes, modifications, additions, or deletions to this Agreement; or

(i) Extended Force Majeure. A Party is excused because of Force Majeure (as defined in Section 11 herein) for more than thirty (30) days from performing any of its material obligations under this Agreement.

4.5.2 Termination by LG&E/KU. LG&E/KU may terminate this Agreement effective immediately upon thirty (30) days' prior written notice thereof to the Reliability Coordinator if:

(a) the Reliability Coordinator loses its NERC certification once obtained; or

(b) FERC issues an order determining that TVA should no longer serve as LG&E/KU's Reliability Coordinator pursuant to this Agreement.

4.5.3 Termination by the Reliability Coordinator. The Reliability Coordinator may terminate this Agreement effective immediately upon thirty (30) days' prior written notice thereof to LG&E/KU if:

(a) LG&E/KU determines to cease being a Balancing Authority and/or Transmission Operator, provided that LG&E/KU shall provide the Reliability Coordinator as much advance written notice of such determination as is practicable to allow the Reliability Coordinator to terminate this Agreement on or prior to the time LG&E/KU ceases to be a Balancing Authority or Transmission Operator;

(b) FERC or any other person or entity takes any action to subject the Reliability Coordinator to FERC's plenary jurisdiction under the Federal Power Act ("FPA"); or

(c) Effective Date has not occurred within eighteen (18) months of the Execution Date.

4.6 Return of Materials. Upon any termination of this Agreement or the conclusion of any Transition Assistance Period pursuant to Section 4.8.1, whichever is later, the Reliability Coordinator shall timely and orderly turn over to LG&E/KU all materials that were prepared or developed prior thereto pursuant to this Agreement, and return or destroy, at the option of LG&E/KU, all Data and other information supplied by LG&E/KU to the Reliability Coordinator or created by the Reliability Coordinator on behalf of LG&E/KU.

4.7 Survival. All provisions of this Agreement which are by their nature or terms intended to survive the termination of this Agreement, including the obligations set forth in Sections 7 and 10, shall survive termination of this Agreement.

4.8 Transition Assistance Services.

4.8.1 Transition Assistance Period. Commencing on the date this Agreement is terminated and continuing for up to six (6) months thereafter (the "Transition Assistance Period"), the Reliability Coordinator shall (a) provide the Functions (and any replacements thereof or substitutions therefor), to the extent LG&E/KU requests such Functions to be performed during the Transition Assistance Period, and (b) cooperate with LG&E/KU in the transfer of the Functions (collectively, the "Transition Assistance Services"). During the Transition Assistance Period, the Parties shall use good faith efforts to ensure a smooth transition.

4.8.2 Transition Assistance Services. The Reliability Coordinator shall, upon LG&E/KU's request, provide the Transition Assistance Services during the Transition Assistance Period at the Reliability Coordinator's actual cost for such services. The quality and level of performance of the Functions by the Reliability Coordinator during the Transition Assistance Period shall not be degraded. After the expiration of the Transition Assistance Period, the Reliability Coordinator shall answer questions from LG&E/KU regarding the Functions on an "as needed" basis at the Reliability Coordinator's then-standard billing rates.

4.8.3 Key Personnel. During the Transition Assistance Period, the Reliability Coordinator shall not terminate, reassign or otherwise remove any Key Personnel without providing LG&E/KU thirty (30) days' prior notice of such termination, reassignment or removal unless such employee (a) voluntarily resigns from the Reliability Coordinator, (b) is dismissed by the Reliability Coordinator for cause, or (c) dies or is unable to work due to his or her disability.

4.9 Change in Reliability Entity. This Agreement is based on the existence of NERC and the applicability of the NERC Standards. If NERC ceases to exist in its current form or is replaced with an entity with authority over a Party's transmission system, the Parties shall promptly meet to determine whether to revise this Agreement to reflect the new reliability entity, if any, and the Parties' obligations in light of the new reliability entity or to terminate this Agreement in accordance with Section 4.2.

4.10 Prior Obligations and Liabilities Unaffected by Termination. Termination of this Agreement shall not relieve the Parties of any of their respective cost obligations or other obligations and liabilities related to this Agreement that were incurred prior to the effective date of termination of this Agreement.

**Section 5 - Data Management.**

5.1 Supply of Data. During the Term, LG&E/KU shall supply to the Reliability Coordinator, and/or grant the Reliability Coordinator access to all Data that the Reliability Coordinator reasonably requires to perform the Functions. The Parties shall agree upon the initial format and manner in which such Data shall be provided. For purposes of this Agreement, "Data" means all information, text, drawings, diagrams, images or sounds which are embodied in any electronic or tangible medium and which (a) are supplied or in respect of which access is

granted to the Reliability Coordinator by LG&E/KU under this Agreement, which shall be LG&E/KU's Data, (b) are prepared, stored or transmitted by the Reliability Coordinator solely on behalf of LG&E/KU, which shall be LG&E/KU's Data; or (c) are compiled by the Reliability Coordinator by aggregating Data owned by LG&E/KU and Data owned by third parties, which shall be Reliability Coordinator's Data.

5.2 Property of Each Party. Each Party acknowledges that the other Party's Data and the other Party's software, base data models and operating procedures for software or base data models ("Processes") are the property of such other Party and agrees that it will do nothing inconsistent with such ownership, including preserving all intellectual property and/or proprietary rights in such other Party's Data and Processes as provided in Section 6.

5.3 Data Integrity. Each Party shall reasonably assist the other Party in establishing measures to preserve the integrity and prevent any corruption or loss of Data, and the Parties shall reasonably assist each other in the recovery of any corrupted or lost Data. Each Party shall retain and preserve any of the other Party's Data that are supplied to it during the Term, and shall exercise commercially reasonable efforts to preserve the integrity of the other Party's Data that are supplied to it during the Term, in order to prevent any corruption or loss of the other Party's Data.

5.4 Confidentiality. Each Party's Data shall be treated as Confidential Information in accordance with the provisions of Section 10.

## **Section 6 - Intellectual Property.**

6.1 Pre-Existing Intellectual Property. Each Party shall own (and continue to own) all trade secrets, Processes and designs and other intellectual property that it owned prior to entering this Agreement, including any enhancements thereto ("Pre-Existing Intellectual Property"). Each Party acknowledges the ownership of the other Party's Pre-Existing Intellectual Property and agrees that it will do nothing inconsistent with such ownership. Each Party agrees that nothing in this Agreement shall give it any right, title or interest in the other Party's Pre-Existing Intellectual Property, other than the rights set forth in this Agreement. The Reliability Coordinator's Pre-Existing Intellectual Property shall include the Reliability Coordinator Retained Rights set forth in Section 6.3. LG&E/KU's Pre-Existing Intellectual Property shall include LG&E/KU Retained Rights set forth in Section 6.4.

6.1.1 Exclusion. Nothing in this Agreement shall prevent either Party from using general techniques, ideas, concepts and know-how gained by its employees during the performance of its obligations under this Agreement in the furtherance of its normal business, to the extent that it does not result in disclosure of the other Party's Data or any data generated from the other Party's Data or other Confidential Information or an infringement by LG&E/KU or the Reliability Coordinator of any intellectual property right. For the avoidance of doubt, the use by a Party of such general techniques, ideas, concepts and know-how gained by its employees during the performance of its obligations under this Agreement shall not be deemed to be an infringement of the other Party's intellectual property rights so long as such matters are retained in the unaided memories of such employees and any Confidential Information is treated in accordance with the provisions of Section 10.

6.2 Jointly-Owned Intellectual Property. Except for the Data described in Section 5.1, all deliverables, whether software or otherwise, to the extent originated and prepared by the Reliability Coordinator exclusively in connection with the performance of its obligations under this Agreement shall be, upon payment of all amounts that may be due from LG&E/KU to the Reliability Coordinator, jointly owned by LG&E/KU and Reliability Coordinator (“Jointly-Owned Intellectual Property”). Each Party shall have the right to use the Jointly-Owned Intellectual Property without any right or duty or accounting to the other Party, except as provided in this Section 6.2. Upon the Reliability Coordinator using, transferring or licensing Jointly-Owned Intellectual Property for or to a third party, the Reliability Coordinator shall reimburse LG&E/KU in an equitable manner as determined by the Parties in good faith for the actual amounts paid by LG&E/KU to the Reliability Coordinator that relate to such Jointly-Owned Intellectual Property. Except as stated in the foregoing sentence, the Reliability Coordinator shall have no other obligation to account to LG&E/KU for any such use, transfer, license, disclosure, copying, modifying or enhancing of the Jointly-Owned Intellectual Property. Notwithstanding anything herein to the contrary, LG&E/KU may use the Jointly-Owned Intellectual Property for its internal business purposes, including licensing or transferring its interests therein to a third party for purposes of operating or performing functions in connection with LG&E/KU’s transmission business.

6.3 Reliability Coordinator Retained Rights. The Reliability Coordinator shall retain all right, title and interest in its proprietary know-how, concepts, techniques, processes, materials and information that were or are developed entirely independently of this Agreement (“Reliability Coordinator Retained Rights”), whether or not such Reliability Coordinator Retained Rights are embodied in a deliverable, whether software or otherwise originated and prepared by the Reliability Coordinator in connection with the performance of its obligations under this Agreement. With respect to the Reliability Coordinator Retained Rights embodied in any deliverable, whether software or otherwise originated and prepared by the Reliability Coordinator in connection with the performance of its obligations under this Agreement, LG&E/KU is hereby granted a nonexclusive, perpetual, worldwide, royalty-free, fully paid-up license under such Reliability Coordinator Retained Rights to use such deliverable for LG&E/KU’s internal business purposes only, including licensing or transferring its interests therein to an Affiliate of LG&E/KU or a third party for purposes of operating or performing functions in connection with LG&E/KU’s transmission business.

6.4 LG&E/KU Retained Rights. LG&E/KU shall retain all right, title and interest in its proprietary know-how, concepts, techniques, processes, materials and information that were or are developed entirely independently of this Agreement (“LG&E/KU Retained Rights”), whether or not such LG&E/KU Retained Rights are embodied in a deliverable, whether software or otherwise originated and prepared by LG&E/KU in connection with the performance of its obligations under this Agreement. With respect to LG&E/KU Retained Rights embodied in any software or otherwise originated and prepared by LG&E/KU in connection with the performance of its obligations under this Agreement, the Reliability Coordinator is hereby granted a nonexclusive, worldwide, royalty-free, fully paid-up license under such LG&E/KU Retained Rights to use such deliverable for the Reliability Coordinator’s performance of its obligations under this Agreement only; provided that LG&E/KU shall not be liable in any way for the use of or reliance on such Reliability Coordinator Retained Rights by the Reliability Coordinator’s Affiliate or third party for any purpose whatsoever.



6.5 Reliability Coordinator Non-Infringement; Indemnification. The Reliability Coordinator warrants to LG&E/KU that all Reliability Coordinator's Data and Processes, Reliability Coordinator Pre-Existing Intellectual Property, Reliability Coordinator Retained Rights, and deliverables prepared, produced or first developed by the Reliability Coordinator in connection with the performance of its obligations under this Agreement shall not infringe on any third party patent, copyright, trade secret or other third party proprietary rights. The Reliability Coordinator shall defend, hold harmless and indemnify LG&E/KU and its Affiliates and their respective employees, officers, directors, principals, owners, partners, shareholders, agents, representatives, consultants, and subcontractors (collectively, "LG&E/KU Representatives") from and against all claims, lawsuits, penalties, awards, judgments, court arbitration costs, attorneys' fees, and other reasonable out-of-pocket costs incurred in connection with such claims or lawsuits based upon the actual or alleged infringement of any of the foregoing rights; provided that LG&E/KU gives prompt written notice of any such claim or action to the Reliability Coordinator, permits the Reliability Coordinator to control the defense of any such claim or action with counsel of its choice, and cooperates with the Reliability Coordinator in the defense thereof; and further provided that such claim or action is not based on any alteration, modification or combination of the deliverable with any item, information or process not provided by the Reliability Coordinator, where there would be no infringement in the absence of such alteration, modification or combination. If any infringement action results in a final injunction against LG&E/KU or the LG&E/KU Representatives with respect to Reliability Coordinator's Data and Processes, Reliability Coordinator Pre-Existing Intellectual Property, Reliability Coordinator Retained Rights or deliverables prepared, produced or first developed by the Reliability Coordinator in connection with the performance of its obligations under this Agreement or in the event the use of such matters or any part thereof, is, in such lawsuit, held to constitute infringement, the Reliability Coordinator agrees that it shall, at its option and sole expense, either (a) procure for LG&E/KU or the LG&E/KU Representatives the right to continue using the infringing matter, or (b) replace the infringing matter with non-infringing items of equivalent functionality or modify the same so that it becomes non-infringing and retains its full functionality. If the Reliability Coordinator is unable to accomplish (a) or (b) above, the Reliability Coordinator shall reimburse LG&E/KU for all costs and fees paid by LG&E/KU to the Reliability Coordinator for the infringing matter. The above constitutes the Reliability Coordinator's complete liability for claims of infringement relating to any the Reliability Coordinator's Data and Processes, Reliability Coordinator Pre-Existing Intellectual Property, Reliability Coordinator Retained Rights, and deliverables prepared, produced or first developed by the Reliability Coordinator in connection with the performance of its obligations under this Agreement.

6.6 LG&E/KU Non-Infringement; Indemnification. LG&E/KU warrants to the Reliability Coordinator that, to its knowledge, all LG&E/KU's Data (except for Data created by the Reliability Coordinator on behalf of LG&E/KU) and Processes, LG&E/KU Pre-Existing Intellectual Property, and LG&E/KU Retained Rights shall not infringe on any third party patent, copyright, trade secret or other third party proprietary rights. LG&E/KU shall defend, hold harmless and indemnify the Reliability Coordinator and its Affiliates and their respective employees, officers, directors, principals, owners, partners, shareholders, agents, representatives, consultants, and subcontractors against all claims, lawsuits, penalties, awards, judgments, court costs, and arbitration costs, attorneys' fees, and other reasonable out-of-pocket costs incurred in connection with such claims or lawsuits based upon the actual or alleged infringement of any of

the foregoing rights; provided that the Reliability Coordinator gives prompt written notice of any such claim or action to LG&E/KU, permits LG&E/KU to control the defense of any such claim or action with counsel of its choice, and cooperates with LG&E/KU in the defense thereof; and further provided that such claim or action is not based on any alteration, modification or combination of the deliverable with any item, information or process not provided by LG&E/KU to the Reliability Coordinator, where there would be no infringement in the absence of such alteration, modification or combination. The above constitutes LG&E/KU's complete liability for claims of infringement relating to any of the LG&E/KU's Data and Processes, LG&E/KU Pre-Existing Intellectual Property, and LG&E/KU Retained Rights.

## **Section 7 - Indemnification.**

**7.1 Indemnification by the Parties.** Each Party ("Indemnifying Party") shall indemnify, release, defend, reimburse and hold harmless the other Party and its Affiliates, and their respective directors, officers, employees, principals, representatives and agents (collectively, the "Indemnified Parties") from and against any and all claims, demands, liabilities, losses, causes of action, awards, fines, penalties, litigation, administrative proceedings and investigations, costs and expenses, and attorney fees (each, an "Indemnifiable Loss") asserted against or incurred by any of the Indemnified Parties arising out of, resulting from or based upon (a) a breach by the Indemnifying Party of its obligations under this Agreement, (b) claims of bodily injury or death of any person or damage to real and/or tangible personal property caused by the negligence or willful misconduct of the Indemnifying Party and its Affiliates and their respective directors, officers, employees, principals, representatives, agents or contractors during the Term, or (c) the acts or omissions of the Indemnifying Party and its Affiliates and their respective directors, officers, employees, principals, representatives, agents or contractors during the Term.

**7.2 No Consequential Damages.** Neither Party shall be liable to the other Party under this Agreement (by way of indemnification, damages or otherwise) for any indirect, incidental, exemplary, punitive, special or consequential damages, except in the case of gross negligence or willful misconduct.

**7.3 Cooperation Regarding Claims.** If an Indemnified Party receives notice or has knowledge of any Indemnifiable Loss that may result in a claim for indemnification by such Indemnified Party against an Indemnifying Party pursuant to this Section 7, such Indemnified Party shall as promptly as possible give the Indemnifying Party notice of such Indemnifiable Loss, including a reasonably detailed description of the facts and circumstances relating to such Indemnifiable Loss, a complete copy of all notices, pleadings and other papers related thereto, and in reasonable detail the basis for its claim for indemnification with respect thereto. Failure to promptly give such notice or to provide such information and documents shall not relieve the Indemnifying Party from the obligation hereunder to respond to or defend the Indemnified Party against such Indemnifiable Loss unless such failure shall materially diminish the ability of the Indemnifying Party to respond to or to defend the Indemnified Party against such Indemnifiable Loss. The Indemnifying Party, upon its acknowledgment in writing of its obligation to indemnify the Indemnified Party in accordance with this Section 7, shall be entitled to assume the defense or to represent the interest of the Indemnified Party with respect to such Indemnifiable Loss, which shall include the right to select and direct legal counsel and other consultants, appear in proceedings on behalf of such Indemnified Party and to propose, accept or reject offers of settlement, all at its sole cost. If and to the extent that any such settlement is reasonably likely to

involve injunctive, equitable or prospective relief or materially and adversely affect the Indemnified Party's business or operations other than as a result of money damages or other money payments, then such settlement will be subject to the reasonable approval of the Indemnified Party. Nothing herein shall prevent an Indemnified Party from retaining its own legal counsel and other consultants and participating in its own defense at its own cost and expense.

### **Section 8 - Contract Managers; Dispute Resolution.**

8.1 LG&E/KU Contract Manager. LG&E/KU shall appoint an individual (the "LG&E/KU Contract Manager") who shall serve as the primary LG&E/KU representative under this Agreement. The LG&E/KU Contract Manager shall (a) have overall responsibility for managing and coordinating the performance of LG&E/KU's obligations under this Agreement, and (b) be authorized to act for and on behalf of LG&E/KU with respect to all matters relating to this Agreement. Notwithstanding the foregoing, the LG&E/KU Contract Manager may, upon prior written notice to the Reliability Coordinator, delegate such of his or her responsibilities to other LG&E/KU employees, as the LG&E/KU Contract Manager deems appropriate. LG&E/KU may, upon prior written notice to the Reliability Coordinator, change the LG&E/KU Contract Manager.

8.2 Reliability Coordinator Contract Manager. The Reliability Coordinator shall appoint, among the Key Personnel identified in Attachment C, an individual (the "Reliability Coordinator Contract Manager") who shall serve as the primary Reliability Coordinator representative under this Agreement. The Reliability Coordinator Contract Manager shall (a) have overall responsibility for managing and coordinating the performance of the Reliability Coordinator's obligations under this Agreement, and (b) be authorized to act for and on behalf of the Reliability Coordinator with respect to all matters relating to this Agreement. Notwithstanding the foregoing, the Reliability Coordinator Contract Manager may, upon prior written notice to LG&E/KU, delegate such of his or her responsibilities to other Key Personnel, as the Reliability Coordinator Contract Manager deems appropriate. The Reliability Coordinator may, upon prior written notice to LG&E/KU, change the Reliability Coordinator Contract Manager. For the avoidance of doubt, LG&E/KU shall not have an approval or consent right with respect to the selection of the Reliability Coordinator Contract Manager.

8.3 Resolution of Disputes. Any dispute, claim or controversy between the Parties arising out of or relating to this Agreement (each, a "Dispute") shall be resolved in accordance with the procedures set forth in this Section 8.3; provided, however, that this Section 8.3 shall not apply to Disputes arising from or relating to (a) the amount of compensation to be paid by LG&E/KU pursuant to the last sentence of Section 3.1, which shall be resolved pursuant thereto, or (b) confidentiality or intellectual property rights (in which case either Party shall be free to seek available legal or equitable remedies).

8.3.1 Notice of Dispute. Each Party shall provide written notice to the other party of any Dispute, including a description of the nature of the Dispute.

8.3.2 Dispute Resolution by Contract Managers. Any Dispute shall first be referred to the LG&E/KU Contract Manager and the Reliability Coordinator Contract Manager, who shall negotiate in good faith to resolve the Dispute.

**8.3.3 Dispute Resolution by Executive Management Representatives.** If the Dispute is not resolved within fifteen (15) days of being referred to the LG&E/KU Contract Manager and the Reliability Coordinator Contract Manager pursuant to **Section 8.3.2**, then each Party shall have five (5) days to appoint an executive management representative who shall negotiate in good faith to resolve the Dispute.

**8.3.4 Exercise of Remedies at Law or in Equity.** If the Parties' executive management representatives are unable to resolve the Dispute within thirty (30) days of their appointment, then each Party shall be free to pursue any remedies available to it and to take any action in law or equity that it believes necessary or convenient in order to enforce its rights or cause to be fulfilled any of the obligations or agreements of the other Party.

**8.4 LG&E/KU Rights Under FPA Unaffected.** Nothing in this Agreement is intended to limit or abridge any rights that LG&E/KU may have to file or make application before FERC under Section 205 of the FPA to revise any rates, terms or conditions of the OATT or any other FPA jurisdictional agreement.

**8.5 Reliability Coordinator Rights Under the TVA Act and FPA Unaffected.** Nothing in this Agreement is intended to limit or abridge any rights that the Reliability Coordinator may have under the TVA Act or the FPA, nor to require the Reliability Coordinator to violate the area limitations set forth in the TVA Act.

**8.6 Statute of Limitations; Continued Performance.** The Parties agree to waive the applicable statute of limitations during the period of time that the Parties are seeking to resolve a Dispute pursuant to **Sections 8.3.2** and **8.3.3**, and the statute of limitations shall be tolled for such period. The Parties shall continue to perform their obligations under this Agreement during the resolution of a Dispute.

## **Section 9 - Insurance.**

**9.1 Requirements.** The Reliability Coordinator shall provide and maintain during the Term insurance coverage in the form and with minimum limits of liability as specified below, unless otherwise agreed to by the Parties.

**9.1.1** Worker's compensation insurance in accordance with the Federal Employees Compensation Act (FECA).

**9.1.2** Commercial general liability or equivalent insurance with a combined single limit of not less than \$1,000,000 per occurrence. Such insurance shall include products/completed operations liability, owners protective, blanket contractual liability, personal injury liability and broad form property damage.

**9.1.3** Errors & Omissions Insurance in the amount of \$5,000,000.

**9.2 Insurance Matters.** All insurance coverages required pursuant to **Section 9.1** shall (a) be provided by insurance companies that have a Best Rating of A or higher, (b) provide that LG&E/KU is an additional insured (other than the workers' compensation insurance), (c) provide that LG&E/KU will receive at least thirty (30) days written notice from the insurer prior to the cancellation or termination of or any material change in any such insurance coverages, and (d) include waivers of any right of subrogation of the insurers thereunder against LG&E/KU.

Certificates of insurance evidencing that the insurance required by Section 9.1 is in force shall be delivered by the Reliability Coordinator to LG&E/KU prior to the Effective Date.

9.3 Compliance. The Reliability Coordinator shall not commence performance of any Functions until all of the insurance required pursuant to Section 9.1 is in force, and the necessary documents have been received by LG&E/KU pursuant to Section 9.2. Compliance with the insurance provisions in Section 9 is expressly made a condition precedent to the obligation of LG&E/KU to make payment for any Functions performed by the Reliability Coordinator under this Agreement. The minimum insurance requirements set forth above shall not vary, limit or waive the Reliability Coordinator's legal or contractual responsibilities or liabilities under this Agreement.

## **Section 10 - Confidentiality.**

10.1 Definition of Confidential Information. For purposes of this Agreement, "Confidential Information" shall mean, in respect of each Party, all activities by such Party and information and documentation of such Party, whether disclosed to or accessed by the other Party, in each case, in connection with this Agreement; provided, however, that the term "Confidential Information" shall not include information that: (a) is independently developed by the recipient, as demonstrated by the recipient's written records, without violating the disclosing Party's proprietary rights; (b) is or becomes publicly known (other than through unauthorized disclosure); (c) is disclosed by the owner of such information to a third party free of any obligation of confidentiality; (d) is already known by the recipient at the time of disclosure, as demonstrated by the recipient's written records, and the recipient has no obligation of confidentiality other than pursuant to this Agreement or any confidentiality agreements between the Parties entered into before the Effective Date; or (e) is rightfully received by a Party free of any obligation of confidentiality.

10.2 Protection of Confidential Information. All Confidential Information shall be held in confidence by the recipient to the same extent and in at least the same manner as the recipient protects its own confidential information, and such Confidential Information shall be used only for purposes of performing obligations under this Agreement. Except as otherwise provided in Section 10.4, neither Party shall disclose, publish, release, transfer or otherwise make available Confidential Information of, or obtained from, the other Party in any form to, or for the use or benefit of, any person or entity without the disclosing Party's prior written consent. Each Party shall be permitted to disclose relevant aspects of the other Party's Confidential Information to its officers, directors, agents, professional advisors, contractors, subcontractors and employees and to the officers, directors, agents, professional advisors, contractors, subcontractors and employees of its Affiliates, to the extent that such disclosure is reasonably necessary for the performance of its duties and obligations or the determination, preservation or exercise of its rights and remedies under this Agreement; provided, however, that the recipient shall take all reasonable measures to ensure that Confidential Information of the disclosing Party is not disclosed or duplicated in contravention of the provisions of this Agreement by such officers, directors, agents, professional advisors, contractors, subcontractors and employees. The obligations in this Section 10 shall not restrict any disclosure pursuant to any local, state or federal governmental agency or authority if such release is necessary to comply with applicable laws, governmental regulations or orders of regulatory bodies or courts; provided that, other than in respect of disclosures pursuant to Section 10.4, the recipient shall give prompt notice to the disclosing Party in reasonable time to exercise whatever legal rights the disclosing Party may

have to prevent or limit such disclosure. Further, the recipient shall cooperate with the disclosing Party in preventing or limiting such disclosure.

10.3 NERC Data Confidentiality Agreement. In addition to, and not in limitation of, the confidentiality restrictions in Section 10.2, each Party shall sign the NERC Data Confidentiality Agreement and shall treat all Confidential Information as transmission operations and transmission system information pursuant to the NERC Data Confidentiality Agreement.

10.4 FERC Requests for Confidential Information. Notwithstanding anything in this Agreement to the contrary, if FERC or its staff, during the course of an investigation or otherwise, requests information from the Reliability Coordinator related to services provided by the Reliability Coordinator to LG&E/KU that the Reliability Coordinator is otherwise required to maintain in confidence pursuant to this Agreement, the Reliability Coordinator shall provide the requested information to FERC or its staff within the time provided for in the request for information. In providing such information to FERC or its staff, the Reliability Coordinator shall, consistent with 18 C.F.R. § 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. The Reliability Coordinator shall notify LG&E/KU when it is notified by FERC or its staff that a request for public disclosure of, or decision to publicly disclose, confidential information has been received, at which time either the Reliability Coordinator or LG&E/KU may respond before such information is made public, pursuant to 18 C.F.R. § 388.112.

## **Section 11 - Force Majeure.**

**11.1** Neither Party shall be liable to the other Party for any failure or delay of performance hereunder due to causes beyond such Party's reasonable control, which by the exercise of reasonable due diligence such Party is unable, in whole or in part, to prevent or overcome (a "Force Majeure"), including acts of God, act of the public enemy, fire, explosion, vandalism, cable cut, storm or other catastrophes, weather impediments, national emergency, insurrections, riots, wars or any law, order, regulation, direction, action or request of any government or authority or instrumentality thereof. Neither Party shall be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure, except for the obligation to pay any amount when due, provided that the affected Party:

11.1.1 gives notice to the other Party of the event or circumstance giving rise to the event of Force Majeure;

11.1.2 affords the other Party reasonable access to information about the event or circumstances giving rise to the event of Force Majeure;

11.1.3 takes commercially reasonable steps to restore its ability to perform its obligations hereunder as soon as reasonably practicable, provided that the affected Party shall not be obligated to take any steps that are not otherwise in accordance with Good Utility Practice; and

11.1.4 exercises commercially reasonable efforts to perform its obligations hereunder.

## **Section 12 - Reporting; Audit.**

12.1 **Reporting.** The Reliability Coordinator shall make regular reports to FERC and LG&E/KU's retail regulators as may be required by applicable law and regulations or as may be requested by such authorities.

12.2 **Books and Records.** The Reliability Coordinator shall maintain full and accurate books and records pertinent to this Agreement, and the Reliability Coordinator shall maintain such books and records for three (3) years following the expiration or early termination of this Agreement or longer if necessary to resolve a pending Dispute. LG&E/KU will have the right, at reasonable times and under reasonable conditions, to inspect and audit, or have an independent third party inspect and audit, the Reliability Coordinator's operations and books to (a) ensure compliance with this Agreement, (b) verify any cost claims or other amounts due hereunder, and (c) validate the Reliability Coordinator's internal controls with respect to the performance of the Functions. The Reliability Coordinator shall maintain an audit trail, including all original transaction records, of all financial and non-financial transactions resulting from or arising in connection with this Agreement as may be necessary to enable LG&E/KU or the independent third party, as applicable, to perform the foregoing activities. LG&E/KU shall be responsible for any costs and expenses incurred in connection with any such inspection or audit, unless such inspection or audit discovers that LG&E/KU was charged inappropriate or incorrect costs and expenses, in which case, the Reliability Coordinator shall be responsible for a percentage of the costs and expenses incurred in connection with such inspection or audit equal to the percentage variance by which LG&E/KU was charged inappropriate or incorrect costs and expenses. The Reliability Coordinator shall provide reasonable assistance necessary to enable LG&E/KU or an independent third party, as applicable, and shall not be entitled to charge LG&E/KU for any such assistance. Amounts incorrectly or inappropriately invoiced by the Reliability Coordinator to LG&E/KU, whether discovered prior to or subsequent to payment by LG&E/KU, shall be adjusted or reimbursed to LG&E/KU by the Reliability Coordinator within twenty (20) days of notification by LG&E/KU to the Reliability Coordinator of the error in the invoice.

12.3 **Regulatory Compliance.** The Reliability Coordinator shall comply with all reasonable requests by LG&E/KU to comply with Section 404 of the Sarbanes-Oxley Act and related regulatory requirements. LG&E/KU may hire, at its expense, or LG&E/KU may direct the Reliability Coordinator to hire, at LG&E/KU expense, an independent auditor to review, audit and prepare audit reports associated with the Reliability Coordinator's controls and systems relating to the Functions and LG&E/KU's financial statements and reports, in accordance with SAS No. 70, Type II. Such reports may not be required more frequently than twice per Contract Year. The Reliability Coordinator shall notify LG&E/KU prior to or at the time of any significant or material change to any internal process or financial control of the Reliability Coordinator that would or might impact the Functions performed for or on behalf of LG&E/KU or that would, or might, have a significant or material effect on such process's mitigation of risk or upon the integrity of LG&E/KU's financial reporting or disclosures and provide sufficient details of the change so as to enable LG&E/KU and/or its independent auditors to review the change and evaluate its impact on its internal controls and financial reporting. The Reliability Coordinator shall cooperate with the independent auditors and LG&E/KU to enable the preparation of the reports necessary to comply with Section 404 of the Sarbanes-Oxley Act, consistent with the other provisions of this Agreement.

### **Section 13 - Independent Contractor.**

The Reliability Coordinator shall be and remain during the Term an independent contractor with respect to LG&E/KU, and nothing contained in this Agreement shall be (a) construed as inconsistent with that status, or (b) deemed or construed to create the relationship of principal and agent or employer and employee, between the Reliability Coordinator and LG&E/KU or to make either the Reliability Coordinator or LG&E/KU partners, joint ventures, principals, fiduciaries, agents or employees of the other Party for any purpose. Neither Party shall represent itself to be an agent, partner or representative of the other Party. Neither Party shall commit or bind, nor be authorized to commit or bind, the other Party in any manner, without such other Party's prior written consent. Personnel employed, provided or used by any Party in connection herewith will not be employees of the other Party in any respect. Each Party shall have full responsibility for the actions or omissions of its employees and shall be responsible for their supervision, direction and control.

**Section 14 - Taxes.**

Each Party shall be responsible for the payment of its own taxes, including taxes based on its net income, employment taxes of its employees, taxes on any property it owns or leases, and sales, use, gross receipts, excise, value-added or other transaction taxes.

**Section 15 - Notices.**

15.1 Notices. Except as otherwise specified herein, any notice required or authorized by this Agreement shall be deemed properly given to a Party when sent to its designated representative by facsimile or other electronic means (with a confirmation copy sent by United States mail, first-class postage prepaid), by hand delivery, or by United States mail, first-class postage prepaid. The Parties' designated representatives are as follows:

If to LG&E/KU:

Louisville Gas and Electric Company  
119 North 3<sup>rd</sup> Street  
Louisville, Kentucky 40202  
Facsimile: (502) 627-4716

And

Kentucky Utilities Company  
119 North 3<sup>rd</sup> Street  
Louisville, Kentucky 40202  
Facsimile: (502) 627-4716

If to the Reliability Coordinator:

Tennessee Valley Authority  
1101 Market Street, PCC 2A  
Chattanooga, Tennessee 37402-2801  
Facsimile: (423) 697-4120



15.2 Changes. Either Party may, from time to time, change the names, addresses, facsimile numbers or other notice information set out in Section 15.1 by notice to the other Party in accordance with the requirements of Section 15.1.

### **Section 16 - Key Personnel; Work Conditions.**

16.1 Key Personnel. All Key Personnel shall be properly certified and licensed, if required by law, and be qualified and competent to perform the Functions. The Reliability Coordinator shall provide LG&E/KU prior written notice of the replacement of any Key Personnel.

16.2 Conduct of Key Personnel and Reporting. The Reliability Coordinator agrees to require that the Key Personnel comply with the Reliability Coordinator's employee code of conduct, a current copy of which has been provided to LG&E/KU. The Reliability Coordinator may amend its employee code of conduct at any time, provided that the Reliability Coordinator shall promptly provide the LG&E/KU Contract Manager with a copy of the amended employee code of conduct. If any Key Personnel commits fraud or engages in material violation of the Reliability Coordinator's employee code of conduct, the Reliability Coordinator shall promptly notify LG&E/KU as provided above and promptly remove any such Key Personnel from the performance of the Functions.

16.3 Personnel Screening. The Reliability Coordinator shall be responsible for conducting, in accordance with applicable law (including the Fair Credit Reporting Act, The Fair and Accurate Credit Transactions Act, and Title VII of the Civil Rights Act of 1964), adequate pre-deployment screening of the Key Personnel prior to commencing performance of the Functions. By deploying Key Personnel under this Agreement, the Reliability Coordinator represents that it has completed the Screening Measures (as defined below) with respect to such Key Personnel. To the extent permitted by applicable law, the term "Screening Measures" shall include, at a minimum, a background check including: (a) a Terrorist Watch Database Search; (b) a Social Security Number trace; (c) motor vehicle license and driving record check; and (d) a criminal history check, including, a criminal record check for each county/city and state/country in the employee's residence history for the maximum number of years permitted by law, up to seven (7) years. Unless prohibited by law, if, prior to or after assigning a Key Personnel to perform the Functions, the Reliability Coordinator learns of any information that the Reliability Coordinator considers would adversely affect such Key Personnel's suitability for the performance of the Functions (including based on information discovered from the Screening Measures), the Reliability Coordinator shall not assign the Key Personnel to the Functions or, if already assigned, promptly remove such Key Personnel from performing the Functions and immediately notify LG&E/KU of such action.

16.4 Security. LG&E/KU shall have the option of barring from LG&E/KU's property any Key Personnel whom LG&E/KU determines is not suitable in accordance with the applicable laws pursuant to Sections 16.1 through 16.3.

### **Section 17 - Miscellaneous Provisions.**

17.1 Governing Law. This Agreement and the rights and obligations of the Parties hereunder shall be governed by and construed in accordance with applicable state and federal laws, without regard to the laws requiring the applicability of the laws of another jurisdiction.

17.2 Amendment. This Agreement shall not be varied or amended unless such variation or amendment is agreed to by the Parties in writing.

17.3 Assignment. Neither Party shall sell, assign, or otherwise transfer any or all of its respective rights hereunder, or delegate any or all of its respective obligations under this Agreement.

17.4 No Third Party Beneficiaries. Nothing in this Agreement is intended to confer any benefits upon any person or entity not a Party to this Agreement. This Agreement is made solely for the benefit of the Parties and nothing herein shall be construed as a stipulation for the benefit of others, and no third party shall be entitled to enforce this Agreement against any Party hereto.

17.5 Waivers. No waiver of any provision of this Agreement shall be effective unless it is signed by the Party against which it is sought to be enforced. The delay or failure by either Party to exercise or enforce any of its rights under this Agreement shall not constitute or be deemed a waiver of that Party's right thereafter to enforce those rights, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right.

17.6 Severability; Renegotiation. The invalidity or unenforceability of any portion or provision of this Agreement shall in no way affect the validity or enforceability of any other portion or provision herein. If any provision of this Agreement is found to be invalid, illegal or otherwise unenforceable, the same shall not affect the other provisions hereof or the whole of this Agreement and shall not render invalid, illegal or unenforceable this Agreement or any of the remaining provisions of this Agreement. If any provision of this Agreement or the application thereof to any person, entity or circumstance, is held by a court or regulatory authority of competent jurisdiction to be invalid, void or unenforceable, or if a modification, condition or other change to this Agreement is imposed by a court or regulatory authority of competent jurisdiction which materially affects the benefits or obligations of the Parties, then the Parties shall in good faith negotiate such amendment or amendments to this Agreement as will restore the relative benefits and obligation of the Parties immediately prior to such holding, modification or condition. If such negotiations are unsuccessful, then either Party may terminate this Agreement pursuant to Section 4.5.1.

17.7 Representations and Warranties. Each Party represents and warrants to the other Party as of the Execution Date and the Effective Date as follows:

17.7.1 Organization. It is duly organized, validly existing and in good standing under the laws of the State in which it was organized or applicable Federal law, and has all the requisite power and authority to own and operate its material assets and properties and to carry on its business as now being conducted and as proposed to be conducted under this Agreement.

17.7.2 Authority. It has the requisite power and authority to execute and deliver this Agreement and, subject to the procurement of applicable regulatory approvals, to perform its obligations under this Agreement. The execution and delivery of this Agreement by it and the performance of its obligations under this Agreement have been duly authorized by all necessary corporate action required on its part.

17.7.3 Binding Effect. Assuming the due authorization, execution and delivery of this Agreement by the other Party, this Agreement constitutes its legal, valid and binding

obligation enforceable against it in accordance with its terms, except as the same may be limited by bankruptcy, insolvency or other similar applicable laws affecting creditors' rights generally, and by general principles of equity regardless of whether such principles are considered in a proceeding at law or in equity.

17.7.4 Regulatory Approval. It has obtained or will obtain by the Effective Date, any and all approvals of, and acceptances for filing by, and has given or will give any notices to, any applicable federal or state authority, that are required for it to execute, deliver, and perform its obligations under this Agreement.

17.7.5 No Litigation. There are no actions at law, suits in equity, proceedings, or claims pending or, to its knowledge, threatened against it before or by any federal, state, foreign or local court, tribunal, or governmental agency or authority that might materially delay, prevent, or hinder the performance by such entity of its obligations hereunder.

17.7.6 No Violation or Breach. The execution, delivery and performance by it of its obligations under this Agreement do not and shall not: (a) violate its organizational documents; (b) violate any applicable law, statute, order, rule, regulation or judgment promulgated or entered by any applicable federal or state authority, which violation could reasonably be expected to materially adversely affect the performance of its obligations under this Agreement; or (c) result in a breach of or constitute a default of any material agreement to which it is a party.

17.8 Further Assurances. Each Party agrees that it shall execute and deliver such further instruments, provide all information, and take or forbear such further acts and things as may be reasonably required or useful to carry out the purpose of this Agreement and are not inconsistent with the provisions of this Agreement.

17.9 Entire Agreement. This Agreement and the Attachments hereto set forth the entire agreement between the Parties with respect to the subject matter hereof, and supersede all prior agreements, whether oral or written, related to the subject matter of this Agreement, including that certain Reliability Coordinator Agreement, dated as of January 10, 2006, between the Parties. The terms of this Agreement and the Attachments hereto are controlling, and no parole or extrinsic evidence, including to prior drafts and drafts exchanged with any third parties, shall be used to vary, contradict or interpret the express terms, and conditions of this Agreement.

17.10 Good Faith Efforts. Each Party agrees that it shall in good faith take all reasonable actions necessary to permit it and the other Party to fulfill their obligations under this Agreement. Where the consent, agreement or approval of any Party must be obtained hereunder, such consent, agreement or approval shall not be unreasonably withheld, delayed or conditioned. Where a Party is required or permitted to act, or omit to act, based on its opinion or judgment, such opinion or judgment shall not be unreasonably exercised. To the extent that the jurisdiction of any federal or state authority applies to any part of this Agreement or the transactions or actions covered by this Agreement, each Party shall cooperate with the other Party to secure any necessary or desirable approval or acceptance of such authorities of such part of this Agreement or such transactions or actions.

17.11 Time of the Essence. With respect to all duties, obligations and rights of the Parties, time shall be of the essence in this Agreement.

17.12 Interpretation. Unless the context of this Agreement otherwise clearly requires:

17.12.1 all defined terms in the singular shall have the same meaning when used in the plural and vice versa;

17.12.2 the terms “hereof,” “herein,” “hereto” and similar words refer to this entire Agreement and not to any particular Section, Attachment or any other subdivision of this Agreement;

17.12.3 references to “Section” or “Attachment” refer to this Agreement, unless specified otherwise;

17.12.4 references to any law, statute, rule, regulation, notification or statutory provision shall be construed as a reference to the same as it applies to this Agreement and may have been, or may from time to time be, amended, modified or re-enacted;

17.12.5 references to “includes,” “including” and similar phrases shall mean “including, without limitation;”

17.12.6 the captions, section numbers and headings in this Agreement are included for convenience of reference only and shall not in any way affect the meaning or interpretation of this Agreement;

17.12.7 “or” may not be mutually exclusive, and can be construed to mean “and” where the context requires there to be a multiple rather than an alternative obligation; and

17.12.8 references to a particular entity include such entity’s successors and assigns to the extent not prohibited by this Agreement.

17.12.9 any capitalized terms used in this Agreement, including the Appendices, that are not defined in this Agreement or in the Appendices, shall have the meaning established in the applicable NERC documentation.

17.13 Joint Effort. Preparation of this Agreement has been a joint effort of the Parties and the resulting document shall not be construed more severely against one of the Parties than against the other and no provision in this Agreement is to be interpreted for or against any Party because that Party or its counsel drafted such provision. Each Party acknowledges that in executing this Agreement it has relied solely on its own judgment, belief and knowledge, and such advice as it may have received from its own counsel, and it has not been influenced by any representation or statement made by the other Party or its counsel not contained in this Agreement.

17.14 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument, binding upon LG&E/KU and the Reliability Coordinator, notwithstanding that LG&E/KU and the Reliability Coordinator may not have executed the same counterpart.

The parties have caused this Reliability Coordinator Agreement to be executed by their duly authorized representatives as of the dates shown below.

## **LOUISVILLE GAS AND ELECTRIC COMPANY**

Name:  
Title:  
Date:

**KENTUCKY UTILITIES COMPANY**

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Name:  
Title:  
Date:

## **ATTACHMENT A TO THE RELIABILITY COORDINATOR AGREEMENT**

### **DESCRIPTION OF THE PRIMARY FUNCTIONS**

The Reliability Coordinator is responsible for bulk transmission reliability, and power supply reliability functions. Bulk transmission reliability functions include reliability analysis, loading relief procedures, re-dispatch of generation and ordering curtailment of transactions and/or load. Power supply reliability functions include monitoring Balancing Authority Area performance and ordering the Balancing Authority to take actions, including load curtailment and increasing/decreasing generation in situations where an imbalance between generation and load places the system in jeopardy. The procedures to be followed by the Reliability Coordinator shall be consistent with those of NERC and are spelled out in the NERC Approved Reliability Plan for the TVA Reliability Coordination Area and TVA Standard Procedures and Policies.

#### **I. Reliability Coordinator General Functions:**

The Reliability Coordinator shall perform the following functions:

- a) Serving as NERC designated reliability coordinator and represent the TVA Reliability Area at the NERC and Regional Reliability Council level.
- b) Implementing applicable NERC and regional reliability criteria initiatives, such as maintaining a connection to NERC's Interregional Security Network ("ISN"), day-ahead load-flow analysis, transmission loading relief procedures, and information exchange.
- c) Developing and coordinating with the Reliability Coordination Advisory Committee ("RCAC") new Reliability Coordinator Procedures and revisions to existing Reliability Coordinator Procedures.
- d) Exchanging timely, accurate, and relevant Transmission System information with LG&E/KU and with other reliability coordinators.
- e) Developing and maintaining system models and tools needed to perform analysis needed to develop operational plans.
- f) Coordinating with neighboring reliability coordinators and other operating entities as appropriate to ensure regional reliability.
- g) All other reliability coordinator functions as required for compliance with applicable NERC Reliability Standards and Regional Reliability Council standards, as the same may be amended or modified from time to time.

#### **II. Real-time Operations:**

##### **A. Reliability Coordinator Functions:**

The Reliability Coordinator shall perform the following functions:

- a) Monitoring, analyzing, and coordinating the reliability of LG&E/KU's facilities and interfaces with other Balancing Authorities, Transmission Operators, and other reliability coordinators.
- b) Performing analyses to develop an evaluation of system conditions. LG&E/KU will provide necessary information (e.g., outages and transactions) and Transmission System conditions, as applicable, to the Reliability Coordinator in accordance with applicable NERC Reliability Standards. The results of these analyses will be provided to LG&E/KU and neighboring reliability coordinators in accordance with applicable NERC Standards and Regional Reliability Council Standards.
- c) Determining, directing, and documenting appropriate actions to be taken by LG&E/KU, in accordance with the NERC Reliability Standards, including curtailment of transmission service or energy schedules, re-dispatch of generation and load shedding as necessary to alleviate facility overloads and abnormal voltage conditions, and other circumstances that affect interregional bulk power reliability.
- d) Coordinating transmission loading relief and voltage correction actions with LG&E/KU and with other reliability coordinators.

**B. LG&E/KU Responsibilities:**

LG&E/KU shall have the following responsibilities:

- a) Ensuring appropriate telemetry and providing Reliability Coordinator real-time operational information for monitoring.
- b) Receiving from the Reliability Coordinator all reliability alerts for TVA Reliability Area and neighboring reliability coordinators.
- c) Following Reliability Coordinator directives for corrective actions (e.g., curtailments or load shedding) during system emergencies or to implement TLR procedures.
- d) Receiving from Reliability Coordinator all notices regarding Transmission System limitations or other reliability issues, as appropriate.

**III. Forward Operations:**

**A. Reliability Coordinator Functions:**

The Reliability Coordinator shall perform the following functions:

- a) Performing analyses and develop an evaluation of the expected next-day Transmission System operations. The results of these analyses shall be provided to LG&E/KU and neighboring reliability coordinators in accordance with applicable NERC Reliability Standards and Regional Reliability Council Standards.
- b) Performing analysis of planned transmission and generation outages and coordination of outages with NERC, participants in reliability coordination

agreements, and other reliability coordinators as appropriate and as required by NERC. This entails analysis and coordination of planned outages which are beyond next day and intra-day outages.

- c) Analyzing and approving all planned maintenance schedules on facilities 100kV and above and planned maintenance of generation facilities submitted by LG&E/KU in conjunction with other work on the regional transmission grid to determine the impact of LG&E/KU's planned maintenance schedule on the reliability of the facilities under TVA's purview as Reliability Coordinator, and the purview of neighboring reliability coordinators, and any other relevant effects; and coordinate impacts on available transfer capability with the Transmission Owner.
- d) Coordinating, as required by either NERC or other agreements, planned maintenance schedules with all adjacent reliability coordination areas and/or Balancing Authority Areas and Transmission Providers; as well as the Transmission Owner.

**B. LG&E/KU Responsibilities:**

LG&E/KU shall have the following responsibilities:

- a) Providing generation-related information (e.g., outages and transactions) and expected Transmission System conditions (e.g., transmission facility outages and transactions), as applicable, to the Reliability Coordinator for the next-day operation in accordance with applicable NERC Reliability Standards and Regional Reliability Council standards.
- b) Submitting facility ratings and operational data for all generators and transmission facilities in the LG&E/KU footprint.
- c) Submitting to the Reliability Coordinator generation dispatch information for the LG&E/KU footprint and following Reliability Coordinator directives regarding dispatch adjustments to mitigate congestion.
- d) Submitting to the Reliability Coordinator generation operation plans and commitments for reliability analysis.
- e) Submitting to the Reliability Coordinator transmission maintenance plans for reliability analysis.
- f) Following Reliability Coordinator directives to revise transmission maintenance plans as required to ensure grid reliability.
- g) Receiving from Reliability Coordinator all notices regarding reliability analyses for the TVA Reliability Area as well as neighboring reliability coordinators.
- h) Representing LG&E/KU on the RCAC and in all RCAC deliberations.

**IV. JRCA Implementation and Regional Congestion Management**



For the purposes of this section IV, capitalized terms will have the definitions used in the JRCA and its related Congestion Management Plan (“CMP”), unless otherwise noted in this section IV.

**A. Reliability Coordinator Functions:**

Reliability Coordinator will fully incorporate the LG&E/KU operations into the procedures and protocols governing other facilities in the Reliability Coordinator’s Reliability Area in accordance with the provisions of the JRCA:

- a) Identifying Coordinated Flowgates and determination of flowgates requiring Reciprocal Coordination (twice annually).
- b) Performing Historic Firm Flow Calculations -- implement transmission service reservation set and designated resources provided by LG&E/KU for established freeze date; calculate historic firm flow values and ratios for all coordinated flowgates on LG&E/KU’s system (bi-annually).
- c) Developing reciprocal coordination agreements that establish how each Operating Entity will consider its own flowgates as well as the usage of other Operating Entities when it determines the amount of flowgate or constraint capacity remaining. This process will include both operating horizon determination as well as forward looking capacity allocation.
- d) Implementing AFC Process -- determine AFC attribute requirements; obtain NNL Impact Data; implement Allocation Calculation Process; implement AFC calculation process.
- e) Provide the Transmission Owner flowgate AFCs on an hourly basis and flowgate allocations on a daily basis.

**B. LG&E/KU Responsibilities:**

LG&E/KU is obligated to uphold the terms and conditions of the JRCA, and providing the Reliability Coordinator with the information and support it needs in order to carry out its duties under Section 2.3.5 of the JRCA, as LG&E/KU 's Reliability Coordinator. LG&E/KU shall have the following responsibilities. LG&E/KU will be responsible for providing Transmission System data to the Reliability Coordinator including, but not limited to:

Operating information:

- (i) Transmission Service Reservations;
- (ii) Load forecast requirements;
- (iii) Flowgates requirements;
- (iv) AFC data requirements;
- (v) PSSE Models Requirements;
- (vi) Designated Network Resources requirements;
- (vii) Jointly owned units;
- (viii) Dynamic schedules;

- (ix) NNL allocations requirements; and,
- (x) NNL Evaluator Requirements.

Projected operating information:

- (i) Unit commitment/merit order;
- (ii) Firm purchase and sales (including grandfathered agreements);
- (iii) Independent power producer information including current operating level, projected operating levels, Scheduled Outage start and end dates;
- (iv) Planned and actual operational start-up dates for any permanently added, removed, or significantly altered transmission segments; and
- (v) Planned and actual start-up testing and operational start-up dates for any permanently added, removed, or significantly altered generation units.

**C. JRCA Responsibilities:**

In addition, the Transmission Owner shall have the following responsibilities in support of the JRCA, which it will carry out in compliance with the terms of the JRCA:

- a) Providing to the Reliability Coordinator all transmission facility plans and facility upgrade schedules.
- b) Providing to the Reliability Coordinator the status of all transmission service requests and all new transmission service agreements.
- c) Receiving from the Reliability Coordinator all flowgate AFCs on an hourly basis and flowgate allocations on a daily basis.
- d) Converting flowgate information provided by the Reliability Coordinator to ATC values for posting on OASIS and for analyzing TSRs.
- e) Implementing CMP business rules for AFC vs. ASTFC.
- f) Honoring all AFC allocations and AFC over-rides from other CMP participants in the evaluation and granting of transmission service.

**V. Reliability Coordination**

**A. Reliability Coordinator Functions:**

The Reliability Coordinator will ensure a long-term (one year and beyond) plan is available for adequate resources and transmission within the TVA Reliability Area. The Reliability Coordinator will integrate the Annual Plan provided by the Transmission Owner with plans of other operating entities in the Reliability Coordination Area and assess the plans to ensure those plans meet reliability standards. The Reliability Coordinator will advise the Transmission Owner

of solutions to plans that do not meet those standards. The Reliability Coordinator will then coordinate the Reliability Area Plan with those of neighboring reliability coordinators and Planning Coordinators to ensure wide-area grid reliability.

These functions include:

- a) Integrating the transmission and resource (demand and capacity) system models provided by the Transmission Owner with those of other Reliability Coordinator Area operating entities to ensure Transmission System reliability and resource adequacy.
- b) Applying methodologies and tools to assess and analyze the Transmission System's expansion plans and the resource adequacy plans.
- c) Collecting all information and data required for modeling and evaluation purposes.
- d) Integrating and verifying that the respective plans of the Resource Planners and Transmission Planners within the TVA Reliability Area meet reliability standards.
- e) Coordinating the Reliability Coordinator Area plan with neighboring Reliability Coordinators for review, as appropriate.
- f) Integrating the Reliability Coordinator Area plan with neighboring Planning Coordinators/reliability coordinators' plans to provide a broad multi-regional bulk system planning view.

**B. LG&E/KU Responsibilities:**

LG&E/KU shall have the following responsibilities:

- a) Providing to the Reliability Coordinator demand and energy end-use customer forecasts, capacity resources, and demand response programs.
- b) Providing to the Reliability Coordinator generator unit performance characteristics and capabilities.
- c) Providing to Reliability Coordinator long-term capacity purchases and sales.

**ATTACHMENT B**

**[RESERVED]**

**ATTACHMENT C**  
**TO THE RELIABILITY COORDINATOR AGREEMENT**

**LIST OF KEY PERSONNEL**

## **TVA Reliability Coordination Services**

### **List of Key Personnel and Qualifications**

#### **August 2006**

#### **Reliability Coordination Services Staff**

Stuart L. Goza, Manager, Reliability Coordination Services  
BS Engineering (Specialization - Electrical Power Systems); Masters in Business Administration  
NERC Certified System Operator  
23 years experience in Electric Utilities Industry - experience in generation planning, transmission planning, control area operations, bulk power marketing and reliability coordination.

Daniel Kehoe, Reliability Coordinator System Operator (RCSO)  
B.S. Electrical Engineering, Professional Engineer License (PE), NERC Certified  
10+ years in Transmission / Substation Planning (Hoosier Energy)  
4+ years in Operational Planning (TVA)  
<1 year as RCSO (TVA)

Jason Schwab, Specialist, Reliability and Operations  
10 years experience in power system operations, 10 years experience in nuclear power plant operations Responsible for monitoring TVA Reliability Area to ensure NERC and TVA reliability standards are maintained.

Mark Creech, Specialist, Reliability Analysis and Operations Bachelor of Science in Engineering (Major: Electrical Engineering), Associate of Science (Completed coursework in the Transfer Program), Associate of Science (Major: Electronics and Control Engineering Technology)  
Specialist, Reliability Analysis and Operations (2004 – present), Manager, NERC/NAESB Policy Interpretation (2003 – 2004), Power Supply Reliability Specialist (2002 – 2003), Associate System Controller (2000 – 2002), SERC (South Eastern Reliability Council ) Compliance Sub-Committee, Senior Instrument and Control “Metrologist” (1985 – 2000)

Mark Vastano, RCSO, NERC Certification #RA200412334- Expires 12/30/2009  
BA in Economics with concentration in business, Completed TVA SGPO program at Wheeler Hydro Plant in 1982.  
Approximately 15 years operating experience with TVA as: Reliability Coordinator, Transmission Provider, Balancing Authority, Transmission operator ( dispatcher SE Cell), Senior Switchboard Operator Shawnee Fossil Plant  
Substation Operator, Operator Hydro Wilson Hydro Plant, several years experience with TVA in Human Resource / Labor relations .

Terry D. Williams, RCSO  
Currently on rotational assignment as Specialist, Reliability Analysis and Operations (SRAO)  
NERC Certified System Operator, Reliability (2000 - present), Certification of Successful Completion of TVA Operator Training Program (1982)

(Over 26 years of experience in Electric Transmission System and Hydro Power Plant operations, with progressive levels of accountability, responsibility and supervision) - 7/2000 - Present Reliability Coordinator System Operator, 7/1993 - 7/2000 Transmission Operator (Power System Dispatcher), 3/1993 - 7/1993 Senior Operator - Hydro, 6/1985 - 3/1993 Operator - Hydro, 5/1982 - 6/1985 Substation Operator II, 2/1980 - 5/1982 Student Generating Plant Operator

Roddie L Stewart, Reliability Coordinator System Operator (RCSO)  
Student Generator Plant Operator 2 year program, Certifications, NERC Certified System Operator Reliability

1.5 Years as substation operator at West Point Ms., 15 Years as Hydro Plant Operator (Great Falls and Wilson Hydro), Passed Senior Operator Hydro Exam in 1997, 3.5 Years Dispatcher (Transmission Operator ) South West and North West Cell for TVA, 3 Years as Reliability Operator/Transmission Provider, 3 Years as Reliability Coordinator System Operator

Joel Wise, Specialist, Reliability Analysis and Operations  
NERC Certification, RA level

Conventional Hydro Operator, Duke Power Co., 1 year  
Pumped Storage Hydro Operator, Duke Power Co., 7 years  
System Operator, Duke Energy, 5 1/2 years, included BA, IA, TP, and RC responsibilities  
Balancing Authority System Operator, TVA, 2 1/2 years, including 1 year as a Senior BA Specialist, Reliability Analysis and Operations, TVA, 2 years

Jeffrey O. Yauman, SRAO

Associate Degree – Electrical Engineering Technology, Associate Degree – Electro-mechanical Engineering Technology, Associate of Arts Degree

NERC Certified System Operator since February 1999 (exp. 10/2008)

March 2004 - Present - SRAO, May 2002 - March 2004 – System Dispatcher, June 1974 – May 2002 Supervisor of System Operations, 1996 – 1999 System Operations - System Dispatcher, 1985 – 1996 System Operations – System Operator, 1980 – 1985 Dispatcher, 1974 – 1980 – System Operations - Technician

Donald Herring, RCSO

Philipsburg-Osceola Area High School, AS Degree Nuclear Technology

8 years qualified (on 3 separate nuclear sites) as Navy Nuclear Operator, 11 years as Transmission Operator (NERC certified), 5 years RCSO (NERC certified).

Greg Byrom, RCSO

Hydro operator training - 2 years at Wilson Hydro, Hydro operator - 1 year at Pickwick Hydro, Substation operator - 3 years Bowling Green Kentucky area, 10 years grade 7 electrical control building operator - Widows Creek Fossil plant, Power system dispatcher training - Chickamauga dispatching office, Power System Dispatcher - 4 years at Jackson - Wilson and Chattanooga SOC, Reliability operator and coordinator - 6 years at Chattanooga System Operations Center and Regional Operations Center

**Wai Ran Wu, SRAO**

BS Electrical Engineering, NERC Certified System Operator  
25 years experience in Electrical Utilities Industry, 15 years in System  
(Generation/Transmission) Planning, 6 years in Engineer/Manager, System Reliability, 4 years in  
Reliability Coordination.

**Transmission System Reliability Group**

**Doug Bailey - Mgr, Transmission System Reliability**

Education: BSEE - University of Kentucky

Experience: 15 years at TVA, 2 years in current position, 2 years as Mgr, Senior Transmission  
Operator, 2 years as Spec, Transmission System Operator, 3 years as Power System Engineer in  
SCADA/EMS, 2 years as Electrical Engineer in Transmission Operations and Maintenance, 4  
years as Power Utilization Engineer.

NERC Certified System Operator (N20015106)

**Jennifer R. Weber, Transmission Reliability Specialist**

Education: BSEE, MSEE (Auburn University), PE License (WA #33920), NERC Certified  
System Operator (N200114999), IEEE Senior Member (#01928019)

Experience: 5 years with TVA: Nuclear Offsite Power (NOP) grid operations analysis and  
support, NERC and IEEE NOP Standards Development. 10 years past experience: Hydro system  
operations planning, power and transmission resource utilization planning, generator outage  
coordination, transmission contract analysis and negotiation, and power budget preparation (City  
of Seattle). Nuclear plant Design Engineering and System Engineering, Licensing support, Root  
Cause Analysis, Management SRO Certification (WPPSS). Lunar Base power system conceptual  
design (NASA/Auburn)

**Colleen M. Hawes, Sr. Electrical Engineer**

Education: BSEE, Auburn University

Experience: 26 years at TVA, 1 year as Senior Engineer in operations planning, 3 years as Senior  
Engineer in resource planning, 10 years as Power Supply Analyst in Bulk Power Trading, 5  
years as Program Manager in Nuclear Engineering, 7 years as Power Supply Engineer

**Gary Kobet, Electrical Engineer**

Education: MSEE Mississippi State University, BSE (electrical) Univ Alabama-Huntsville,  
registered P.E. in Alabama

Experience: 16 years for TVA, 10 as field engineer, 6 as protection engineer, 3 months in present  
section studying voltage stability

**Richard McCrory, Electrical Engineer**

Education: BSEE, Auburn University

Experience: 5 year with TVA, 4 years in resource planning, 1 year in operations planning

**Shaun McFarland, Electrical Engineer**

Education: BSEE, Mississippi State University

Experience: 4 years with TVA in operations planning.



Armando Rodriguez, Electrical Engineer  
Education: BSEE, Tennessee Tech University  
Experience: 3.5 years with TVA in operations planning.

Chuck Shue, Electrical Engineer  
Education: BSEE, Mississippi State University  
Experience: 3.5 years with TVA in operations planning.

Valarie Clark, Electrical Engineer  
Education: BS, Southern University, MSE University of Portland  
Experience: 2.5 years with TVA in operations planning. 2 years with BPA in long-term planning.

Shaker Manns, Electrical Engineer  
Education: BSEE, University of Tennessee, Chattanooga  
Experience: 1 year with TVA in operations planning.

Ben Taylor, Electrical Engineer  
Education: BSEE, University of Tennessee, Chattanooga  
Experience: 3 months with TVA in operations planning

Nate Schweighart, Electrical Engineer  
Education: BSEE, University of Illinois, Champaign-Urbana  
Experience: 5 years with TVA in transmission planning

**EXHIBIT 1**  
**TO THE RELIABILITY COORDINATOR AGREEMENT**

A copy of the Joint Reliability Coordination Agreement and the Congestion Management Process is available at: [http://www.midwestiso.org/publish/Folder/2b8a32\\_103ef711180\\_-75ee0a48324a?rev=1](http://www.midwestiso.org/publish/Folder/2b8a32_103ef711180_-75ee0a48324a?rev=1).

**ATTACHMENT R**  
**FEASIBILITY ANALYSIS SERVICE (“FAS”) AGREEMENT**

Name of Project:

Reservation:

FAS Agreement Number:

Date Request sent to Transmission Owner:

Entity making request:		
Responsible party marking request:		
Phone:	Fax:	Email:
Nature of Request:		
Service Type:		Firm:
POR:		POD:
SOURCE:		SINK:
Transaction Period:		

Pursuant to the LG&E/KU Open Access Transmission Tariff, any Eligible Customer may request that the Transmission Owner perform or cause to be performed (by the Transmission Owner or a third party at the Transmission Owner’s option) a Feasibility Analysis. This Agreement shall be signed and returned to the Transmission Owner within **15 days** in order for the FAS request to remain valid.

1. The Feasibility Analysis shall be limited to an informal assessment of the nature of, costs of and timeline for the direct assignment facilities or network upgrades necessary to provide Network Integration Transmission Service to the requesting Transmission or Network Customer. **SUCH COST AND TIME ESTIMATES ARE A HIGH-LEVEL ESTIMATE ONLY AND ARE EXPRESSLY NON-BINDING ON ANY OF THE PARTIES. THE TRANSMISSION OWNER RETAINS ITS FULL AND SOLE AUTHORITY TO CONDUCT A FORMAL SIS AND TO EVALUATE REQUESTS FOR SERVICE.**
2. The Feasibility Analysis will analyze the request based on the existing state of the system, as comprised by the base case and the Transmission Expansion Plan for the year in which the FAS request is made. The Feasibility Analysis will not take into account either a) pending requests for transmission service or b) pending FAS requests. Additionally the FAS will not address conditional firm or planning redispatch services.
3. The Feasibility Analysis shall be completed within 30 days of return of this signed Agreement. In the event the Feasibility Analysis is not completed within 30 days, you will be notified of the estimated completion date and provided an explanation of the delay.
4. The requesting entity shall pay the Transmission Owner a flat fee of \$5,000.00 (five thousand dollars), which must be paid before the Feasibility Analysis can commence. If the requesting entity subsequently requests a System Impact Study pursuant to the Tariff, the Feasibility Analysis fee will be credited back to the requesting entity, up to the amount of the cost of any subsequent System Impact Study.

I agree to the terms and conditions of this FAS Agreement and authorize the Transmission Owner or the Transmission Owner's designee to proceed with the Feasibility Analysis.

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Date)

Accepted by the Transmission Owner:

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Date)

This FAS Agreement should be returned executed via fax for time-stamp to Transmission Owner at [\_\_\_\_\_]. An executed hard copy should also be mailed to:

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

Additional details regarding the Feasibility Analysis should be coordinated through [\_\_\_\_\_] at [Phone].

This agreement completed by:  
Title:

Date:  
Phone: