# Large Filing Separator Sheet

Case Number: 10-2929-EL-UNC

File Date: 5/2/2012

Section: 3

Number of Pages:

Description of Document: Exhibits

## 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 PJM Region 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 Provider Responsibilities:

In order to provide the Network Customer with Network Integration Transmission Service over the Transmission Provider's Transmission Systems: (a) the Transmission Provider will plan and operate the Transmission System in accordance with Good Utility Practice and its planning obligations in Schedule 6 of the Operating Agreement; and (b) the Transmission Owners will be obligated to construct and maintain the Transmission System in accordance with the terms and conditions of the Tariff, the Operating Agreement, and Good Utility Practice. 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 Provider to calculate available transfer capability. The Transmission Provider shall include the Network Customer's Network Load in the Transmission System planning and the Transmission Owners shall, consistent with the terms and conditions of the Tariff, the Operating Agreement, and 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 delivery of each Transmission Owner's own generating and purchased resources to its Native Load Customers.

#### 28.3 Network Integration Transmission Service:

The Transmission Provider will provide firm transmission service over 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 each 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 Provider's Transmission System to deliver energy to its Network Loads from resources that have not been designated as Network Resources. Such energy shall be transmitted, on an as-available basis, at no additional charge. Secondary service shall not require the filing of an Application for Network Integrated Transmission Service under the Tariff. However, all other requirements of Part III of the Tariff (except for transmission rates) shall apply to secondary service. Deliveries from resources other than Network Resources will have a higher priority than any Non-Firm Point-To-Point Transmission Service under Part II of the Tariff.

## 28.5 [Reserved]

#### 28.6 Restrictions on Use of Service:

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

## 29 Initiating Service

#### 29.1 Condition Precedent for Receiving Service:

Subject to the terms and conditions of Part III of the Tariff, the Transmission Provider will provide Network Integration Transmission Service to any Eligible Customer, provided that (i) the Eligible Customer completes an Application for service as provided under Part III of the Tariff or, with respect to a state required retail access program, provides the information required under the Service Agreement, (ii) the Eligible Customer and the Transmission Provider in coordination with the affected Transmission Owners complete the technical arrangements set forth in Sections 29.3 and 29.4, (iii) the Eligible Customer executes a Service Agreement pursuant to Attachment F or Attachment F-1 for service under Part III of the Tariff or requests in writing that the Transmission Provider file a proposed unexecuted Service Agreement with the Commission, and (iv) the Eligible Customer executes a Network Operating Agreement with the Transmission Provider pursuant to Attachment G, or requests in writing that the Transmission Provider file a proposed unexecuted Network Operating Agreement.

Effective Date: 7/14/2011 - Docket #: ER11-4040-000

#### 29.2 Application Procedures:

An Eligible Customer requesting service under Part III of the Tariff must submit an Application to the Transmission Provider as far as possible in advance of the month in which service is to commence. Unless subject to the procedures in Section 2, Completed Applications for Network Integration Transmission Service will be assigned a Queue Position 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 (except for applications for Network Integration Transmission Service pursuant to state required retail access programs for which Transmission Customers shall provide the information required under the Service Agreement) on the Transmission Provider's OASIS. Prior to implementation of the Transmission Provider's OASIS, a Completed Application may be submitted by (i) transmitting the required information to the Transmission Provider by telefax, or (ii) providing the information by telephone over the Transmission Provider's time recorded telephone line. For applications pursuant to state required retail access programs, the information required under the Service Agreement should be submitted on the Transmission Provider's specified electronic information system established for such programs. Each of these methods will provide a timestamped record for establishing the service priority of the Application. A Completed Application (other than applications for Network Integration Transmission Service pursuant to a state required retail access program, which shall be governed by Attachment F-1 and the specifications thereto) shall provide all of the information included in 18 C.F.R. § 2.20 including but not limited to the following:

- (i) The identity, address, telephone number and facsimile number of the party requesting service;
- (ii) A statement that the party requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff;
- (iii) A description of the Network Load at each delivery point. This description should separately identify and provide the Eligible Customer's best estimate of the total loads to be served at each transmission voltage level, and the loads to be served from each Transmission Provider substation at the same transmission voltage level. The description should include a ten (10) year forecast of summer and winter load and resource requirements beginning with the first year after the service is scheduled to commence;
- (iv) The amount and location of any interruptible loads included in the Network Load. This shall include the summer and winter capacity requirements for each interruptible load (had such load not been interruptible), that portion of the load subject to interruption, the conditions under which an interruption can be implemented and any limitations on the amount and frequency of interruptions. An Eligible Customer should identify the amount of interruptible customer load (if any) included in the 10 year load forecast provided in response to (iii) above;

- (v) A description of Network Resources (current and 10-year projection). For each on-system Network Resource, such description shall include:
- Unit size and amount of capacity from that unit to be designated as Network Resource
- VAR capability (both leading and lagging) of all generators
- Operating restrictions
  - Any periods of restricted operations throughout the year
  - Maintenance schedules
  - Minimum loading level of unit
  - Normal operating level of unit
  - Any must-run unit designations required for system reliability or contract reasons
- Approximate variable generating cost (\$/MWH) for redispatch computations
- Arrangements governing sale and delivery of power to third parties from generating facilities located in the Transmission Provider Control Areas, where only a portion of unit output is designated as a Network Resource
- For each off-system Network Resource, such description shall include:
  - Identification of the Network Resource as an off-system resource
- Amount of power to which the customer has rights
  - Identification of the control area from which the power will originate
  - Delivery point(s) to the Transmission Provider's Transmission System
  - Transmission arrangements on the external transmission system(s)
- Operating restrictions, if any
  - Any periods of restricted operations throughout the year
  - Maintenance schedules
  - Minimum loading level of unit

- Normal operating level of unit
- Any must-run unit designations required for system reliability or contract reasons
- Approximate variable generating cost (\$/MWH) for redispatch computations;
- (vi) Description of Eligible Customer's transmission system;
- Load flow and stability data, such as real and reactive parts of the load, lines, transformers, reactive devices and load type, including normal and emergency ratings of all transmission equipment in a load flow format compatible with that used by the Transmission Provider
- Operating restrictions needed for reliability
- Operating guides employed by system operators
- Contractual restrictions or committed uses of the Eligible Customer's transmission system, other than the Eligible Customer's Network Loads and Resources
- Location of Network Resources described in subsection (v) above
- 10 year projection of system expansions or upgrades
- Transmission System maps that include any proposed expansions or upgrades
- Thermal ratings of Eligible Customer's Control Area ties with other Control Areas;
- (vii) Service Commencement Date and the term of the requested Network Integration Transmission Service. The minimum term for Network Integration Transmission Service is one year except that, for service provided with respect to a state required retail access program, the minimum term is one day;
- (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 Provider's planning process established in Schedule 6 of the Operating Agreement.

In addition, a party requesting Transmission Service shall provide the information specified in, and otherwise comply with, the "PJM Credit Policy" set forth in Attachment Q hereto. Unless the Parties agree to a different time frame, the Transmission Provider must acknowledge the request within ten (10) days of receipt. The acknowledgement must include a date by which a response, including a Service Agreement, will be sent to the Eligible Customer. If an Application fails to meet the requirements of this section, the Transmission Provider shall notify the Eligible Customer requesting service within fifteen (15) days of receipt and specify the reasons for such failure. Wherever possible, the Transmission Provider will attempt to remedy deficiencies in the Application through informal communications with the Eligible Customer. If such efforts are unsuccessful, the Transmission Provider shall return the Application without prejudice to the Eligible Customer filing a new or revised Application that fully complies with the requirements of this section. The Eligible Customer will be assigned a new Queue Position consistent with the date of the new or revised Application. The Transmission Provider shall treat this information consistent with the standards of conduct contained in Part 37 of the Commission's regulations.

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

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

#### 29.4 Network Customer Facilities:

The provision of Network Integration Transmission Service shall be conditioned upon the Network Customer's constructing, maintaining and operating the facilities on its side of each delivery point or interconnection necessary to reliably deliver capacity and energy from the Transmission Provider's Transmission System to the Network Customer or, with respect to service provided pursuant to a state required retail access program, for otherwise arranging for the delivery of its energy from the delivery point or interconnection. The Network Customer's side of each such delivery point or interconnection or, with respect to service provided pursuant to a state required retail access program, for otherwise arranging for the delivery of its energy from the delivery point or interconnection.

## 29.5 Filing of Service Agreement:

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

### 30 Network Resources

#### 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 Provider with as much advance notice as practicable (notwithstanding the requirements in this section 30.2, the applicable requirements of Attachment DD of the Tariff, the Reliability Assurance Agreement, and the PJM Manuals regarding the designation of Network Resources shall apply). A request for Transmission Service associated with designation of a new Network Resource must be made through the Transmission Provider's OASIS by a request for modification of service pursuant to an Application under Section 29. This request must include a statement that the new network resource satisfies the following conditions: (1) the Network Customer owns the resource, has committed to purchase generation pursuant to an executed contract, or has committed to purchase generation where execution of a contract is contingent upon the availability of transmission service under Part III of the Tariff; and (2) the Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program. The Network Customer's request will be deemed deficient if it does not include this statement and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff. In the event the Network Resource to be designated consists of new generation facilities in the PJM Region, the Network Customer or the owner of the generating facilities also must submit an Interconnection Request pursuant to Part IV of the Tariff. In the event the Network Resource to be designated is Behind The Meter Generation, the designation must be made before the commencement of a Planning Period as that term is defined in the Operating Agreement and will remain in effect for the entire Planning Period. In the event the Network Resource to be designated will use interface capacity and is for a period of less than one year, the designation request must be submitted in accordance with the time requirements set forth in sections 17.8 and 17.9 and will be processed together with, and in the same manner as, requests for Short-Term Firm Point-To-Point Transmission Service.

Effective Date: 9/17/2010

#### **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 at any time by providing notification to the Transmission Provider through eRPM 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 eRPM, and should indicate whether the request is for indefinite or temporary termination. A request for indefinite termination of Network Resource status must indicate the date and time that the termination is to be effective, and the identification and capacity of the resource(s) or portions thereof to be indefinitely terminated. A request for temporary termination of Network Resource status must include the following:

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

As part of a temporary termination, a Network Customer may only redesignate the same resource that was originally designated, or a portion thereof. Requests to redesignate a different resource and/or a resource with increased capacity will be deemed deficient and the Transmission Provider will follow the procedures for a deficient application as described in Section 29.2 of the Tariff.

<sup>\*</sup> Pursuant to the notice granting extension of effective date, 120 FERC ¶ 61,222 (2007), the effective date for the language "but not later than the firm scheduling deadline for the period of termination" was extended pending further order by the Commission.

#### 30.4 Operation of Network Resources:

The Network Customer shall not operate its designated Network Resources located in the Network Customer's or Transmission Provider's Control Area(s) 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 net sales of energy through the interchange energy market established under the Operating Agreement, 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 Provider in response to an emergency or other unforeseen condition which may impair or degrade the reliability of the Transmission System. For all Network Resources not physically connected with the Transmission Provider's Transmission System, the Network Customer may not schedule delivery of energy in excess of the Network Resource's capacity, as specified in the Network Customer's Application pursuant to Section 29, unless the Network Customer supports such delivery within the Transmission Provider's Transmission System by either obtaining Point-to-Point Transmission Service or utilizing secondary service pursuant to Section 28.4. Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that a Network Customer's schedule at the delivery point for a Network Resource not physically interconnected with the Transmission Provider's Transmission System exceeds the Network Resource's designated capacity, excluding energy delivered using secondary service or Point-to-Point Transmission Service.

#### 30.5 Network Customer Redispatch Obligation:

As a condition to receiving Network Integration Transmission Service, the Network Customer agrees to redispatch its Network Resources as requested by the Transmission Provider pursuant to Section 33.2. To the extent practical, the redispatch of resources pursuant to this section shall be on a least cost, non-discriminatory basis among all Network Customers and the Transmission Owners.

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

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

### 30.7 Limitation on Designation of Network Resources:

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

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

There is no limitation upon a Network Customer's use of the Transmission Provider's Transmission System at any particular interface to integrate the Network Customer's Network Resources (or substitute economy purchases) with its Network Loads. However, a Network Customer's use of the Transmission Provider's total interface capacity with other transmission systems may not exceed the Network Customer's Load.

#### 30.9 Network Customer Owned Transmission Facilities:

The Network Customer that owns existing transmission facilities that are integrated with the Transmission Provider's Transmission System may be eligible to receive consideration either through a billing credit or some other mechanism. In order to receive such consideration the Network Customer must demonstrate that its transmission facilities are integrated into the plans or operations of the Transmission Provider to serve its power and transmission customers. For facilities added by the Network Customer subsequent to the [effective date of a Final Rule in RM05-25-000], the Network Customer shall receive credit for such transmission facilities added if such facilities are integrated into the operations of the Transmission Provider's facilities. 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 Provider will provide Network Integration Transmission Service. The Network Loads shall be specified in the Service Agreement, except with respect to loads served pursuant to state required retail access programs for which the Transmission Customer shall provide information regarding Network Loads using the Transmission Provider's specified electronic information system for such programs in accordance with the Service Agreement.

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

The Network Customer shall provide the Transmission Provider with as much advance notice as reasonably practicable of the designation of new Network Load that will be added to the Transmission System. A designation of new Network Load must be made through a modification of service pursuant to a new Application. The affected Transmission Owners, in accordance with the terms and conditions of the Tariff and the Operating Agreement, will use due diligence to install any transmission facilities required to interconnect a new Network Load designated by the Network Customer. The costs of new facilities required to interconnect a new Network Load shall be determined in accordance with the procedures provided in Section 32.4 and shall be charged to the Network Customer in accordance with Commission policies.

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

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

#### 31.4 New Interconnection Points:

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

#### 31.5 Changes in Service Requests:

Under no circumstances shall the Network Customer's decision to cancel or delay a requested change in Network Integration Transmission Service (e.g. the addition of a new Network Resource or designation of a new Network Load) in any way relieve the Network Customer of its obligation to pay the costs of transmission facilities constructed by a Transmission Owner and charged to the Network Customer as reflected in the Service Agreement. However, the Transmission Provider must treat any requested change in Network Integration Transmission Service in a non-discriminatory manner.

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

The Network Customer shall provide the Transmission Provider with annual updates of Network Load and Network Resource forecasts consistent with those included in its Application for Network Integration Transmission Service under Part III of the Tariff including, but not limited to, any information provided under section 29.2(ix) pursuant to the Transmission Provider's planning process in Schedule 6 of the Operating Agreement. The Network Customer also shall provide the Transmission Provider with timely written or electronic notice of material changes in any other information provided in its Application relating to the Network Customer's Network Load, Network Resources, its transmission system or other aspects of its facilities or operations affecting the Transmission Provider's ability to provide reliable service.

#### 31.7 Changing Network Load Energy Settlement Area Definitions:

A network Customer receiving transmission service pursuant to Attachment F of this Tariff may change the definition of its existing Network Load Energy Settlement Area in accordance with the procedures set forth in the PJM Manuals and the Network Customer's existing rights under the Tariff. Notwithstanding any other relevant provision(s) of this Tariff, advance notice of any such change described in the PJM Manuals must be provided to the Transmission Provider and the effective date of such change shall coincide with the first day of a Planning Period, as defined in the Operating Agreement. If system upgrades are required to effect a Network Load Energy Settlement Area change, all required upgrades shall be completed prior to the requested effective date of the change; if all required system upgrades are not completed prior to the requested effective date, the effective date shall be the first day of the Planning Period that immediately follows completion of all system upgrades. A Network Integration Transmission Service customer receiving transmission service pursuant to Attachment F of this Tariff may not change the definition of its existing Network Load Energy Settlement Area to a less specific settlement area, except in circumstances where there has been a physical change to the relevant transmission system infrastructure, as set forth in the PJM Manuals, such that settlement according to the previously defined Energy Settlement Area is no longer possible.

32	Initial Study	y Procedures	For Network	Integration	Transmission	Service Req	juests
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## 32.1 Notice of Need for Initial Study:

After receiving a request for service, the Transmission Provider shall determine on a non-discriminatory basis whether an Initial Study is needed. The purpose of the Initial Study shall be to assess whether the Transmission System has sufficient available capability to provide the requested service. If the Transmission Provider determines that an Initial Study is necessary to evaluate the requested service, it shall so inform the Eligible Customer, as soon as practicable. In such cases, the Transmission Provider shall within thirty (30) days of receipt of a Completed Application, tender an Initial Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for the required Initial Study. For a service request to remain a Completed Application, the Eligible Customer shall execute the Initial Study Agreement and return it to the Transmission Provider within fifteen (15) days. If the Eligible Customer elects not to execute the Initial Study Agreement, its Application shall be deemed withdrawn and its deposit shall be returned with interest.

# 32.2 Initial Study Agreement and Cost Reimbursement:

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

#### 32.3 Initial Study Procedures:

Upon receipt of an executed Initial Study Agreement, the Transmission Provider will use due diligence to complete the required Initial Study within a sixty (60) day period. The Initial Study shall generally assess any system constraints to evaluate whether the Transmission System has sufficient capability to provide the requested service and redispatch options, additional Direct Assignment Facilities or Network Upgrades required to provide the requested service. In the event that the Transmission Provider is unable to complete the required Initial 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 Initial Study and related work papers shall be made available to the Eligible Customer as soon as the Initial Study is complete. The Transmission Provider will use the same due diligence in completing the Initial Study for an Eligible Customer as it uses when completing studies for a Transmission Owner. The Transmission Provider shall notify the Eligible Customer immediately upon completion of the Initial Study whether a System Impact Study will be needed to more fully assess and identify the Network Upgrades and/or Local Upgrades that will be needed to accommodate all or part of the request for service or that no costs are likely to be incurred for new transmission facilities or upgrades. In the event that a System Impact Study will be needed, the procedures and other terms of Part VI shall apply to the Completed Application.

# 32.4 Retaining Queue Position:

Except when the Transmission Provider determines that a System Impact Study is needed, in order for a request to remain a Completed Application, within thirty (30) days after its receipt of the completed Initial Study, the Eligible Customer must execute a Service Agreement or request the filing of an unexecuted Service Agreement, or the Application shall be deemed terminated and withdrawn.

# 32.5 Penalties for Failure to Meet Study Deadlines:

Section 19.8 defines penalties that apply for failure to meet the study completion due diligence deadlines for Initial Studies, System Impact Studies, and Facilities Studies for Eligible Customers. These same requirements and penalties apply to service under Part III of the Tariff.

# 33 Load Shedding and Curtailments

# 33.1 Procedures:

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

#### 33.2 Transmission Constraints:

During any period when the Transmission Provider determines that a transmission constraint exists on the Transmission System, and such constraint may impair the reliability of the Transmission Provider's system, the Transmission Provider will take whatever actions, consistent with Good Utility Practice, that are reasonably necessary to maintain the reliability of the Transmission Provider's system. To the extent the Transmission Provider determines that the reliability of the Transmission System can be maintained by redispatching resources, the Transmission Provider will initiate procedures pursuant to the Network Operating Agreement to redispatch all Network Resources and the Transmission Owners' 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 Owners' use of the Transmission System on behalf of their Native Load Customers and any Network Customer's use of the Transmission System to serve its designated Network Load.

# 33.3 Cost Responsibility for Relieving Transmission Constraints:

Whenever the Transmission Provider implements least-cost redispatch procedures in response to a transmission constraint, the Transmission Owners and the Network Customers will bear the costs of such redispatch in accordance with Attachment K.

## 33.4 Curtailments of Scheduled Deliveries:

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

## 33.5 Allocation of Curtailments:

The Transmission Provider shall, on a non-discriminatory basis, Curtail the transaction(s) that effectively relieve the constraint. However, to the extent practicable and consistent with Good Utility Practice, any Curtailment will be shared by each Transmission Owner and Network Customer in proportion to their respective Load Ratio Shares. The Transmission Provider shall not direct the Network Customer to Curtail schedules to an extent greater than the Transmission Provider would Curtail the schedules of a Transmission Owner under similar circumstances.

# 33.6 Load Shedding:

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

## 33.7 System Reliability:

Notwithstanding any other provisions of this Tariff, the Transmission Provider reserves the right. consistent with Good Utility Practice and on a not unduly discriminatory basis, to Curtail Network Integration Transmission Service without liability on the Transmission Provider's part for the purpose of making necessary adjustments to, changes in, or repairs on its lines, substations and facilities, and in cases where the continuance of Network Integration Transmission Service would endanger persons or property. In the event of any adverse condition(s) or disturbance(s) on the Transmission Provider's Transmission System or on any other system(s) directly or indirectly interconnected with the Transmission Provider's Transmission System, the Transmission Provider, consistent with Good Utility Practice, also may Curtail Network Integration Transmission Service in order to (i) limit the extent or damage of the adverse condition(s) or disturbance(s), (ii) prevent damage to generating or transmission facilities, or (iii) expedite restoration of service. The Transmission Provider will give the Network Customer as much advance notice as is practicable in the event of such Curtailment. Any Curtailment of Network Integration Transmission Service will be not unduly discriminatory relative to a Transmission Owner's use of the Transmission System on behalf of its Native Load Customers. The Transmission Provider shall specify the rate treatment and all related terms and conditions applicable in the event that the Network Customer fails to respond to established Load Shedding and Curtailment procedures.

# 34 Rates and Charges

The Network Customer shall pay PJMSettlement, in its own name, or as agent for the Transmission Provider for any Direct Assignment Facilities, Ancillary Services, PJM Administrative Service, any applicable Transmission Enhancement Charge(s) and applicable study costs, consistent with Commission policy, along with the following:

Effective Date: 1/1/2011 - Docket #: ER11-2527-000

## 34.1 Monthly Demand Charge:

(a) The Network Customer shall pay a monthly Demand Charge for Zone Network Load and Non-Zone Network Load, which shall be determined as follows:

MDC = Sum of MDCZ for all Zones plus the MDCNZ for Non-Zone Network

Load

DDCNZ =

MDCZ = Sum of DDCZ for each day of the calendar month for the Zone

 $DDCZ = DCPZ \times RTZ/365$ 

MDCNZ = Sum of DDCNZ for each day of the calendar month for Non-Zone Network Load

#### Where:

MDC is the monthly demand charge

MDCZ is the monthly demand charge for a Zone

DCPNZ X RTNZ/365

DDCZ is the daily demand charge for a Zone

DCPZ is the daily load of the Network Customer located within a Zone coincident with the annual peak of the Zone (as adjusted pursuant to sections 34.2 and 34.3 below).

RTZ is the rate for Network Integration Transmission Service from Attachment H for the Zone in which the Zone Network Load is located, stated in dollars per megawatt per year

MDCNZ is the monthly demand charge for Non-Zone Network Load

DDCNZ is the daily demand charge for Non-Zone Network Load

DCPNZ is the daily transmission responsibility for Non-Zone Network Load

RTNZ is the rate for Network Integration Transmission Service for Non-Zone Network Load from Attachment H-A, stated in dollars per megawatt per year

The zonal daily load (DCPZ) of the Network Customer shall be the sum of the Network Customer's individual wholesale and retail customer Zone Network Loads (including losses) at the time of the annual peak of the Zone in which the load is located. For Non-Zone Network Load, the daily transmission responsibility of the Network Customer shall be the sum of the Network Customer's Network Load at the border of the PJM Region at the time of the annual

peak of such region; provided that Non-Zone Network Load that is subject to charges for network integration transmission service under the open-access transmission tariff of the Midwest Independent Transmission System Operator, Inc. shall be excluded from this calculation if such load commenced being served on or after April 1, 2004 pursuant to an application for service submitted on or after November 17, 2003.

# 34.2 Netting of Behind the Meter Generation.

The daily load of a Network Customer does not include load served by operating Behind The Meter Generation. The daily load of a Network Customer shall not be reduced by energy injections into the transmission system by the Network Customer.

# 34.3 Netting of Non-Retail Behind The Meter Generation.

Netting of Behind The Meter Generation for Network Customers with regard to Non-Retail Behind The Meter Generation shall be subject to the following limitations:

For calendar year 2006, 100 percent of the operating Non-Retail Behind The Meter Generation shall be netted, provided that the total amount of Non-Retail Behind The Meter Generation in the PJM Region does not exceed 1500 megawatts ("Non-Retail Threshold"). For each calendar year thereafter, the Non-Retail Threshold shall be proportionately increased based on load growth in the PJM Region but shall not be greater than 3000 megawatts. Load growth shall be determined by Transmission Provider based on the most recent forecasted weather-adjusted coincident summer peak of the PJM Region divided by the weather-adjusted coincident peak for the previous summer for the same area. After the load growth factor is applied, the Non-Retail Threshold will be rounded up or down to the nearest whole megawatt and the rounded number shall be the Non-Retail Threshold for the current year and shall be the base amount for calculating the Non-Retail Threshold for the succeeding year. If the total amount of Non-Retail Behind The Meter Generation that the Network Customer may net shall be adjusted according to the following formula:

Network CustomerNetting Credit = (NRT / PJM NRBTMG) \* Network Customer operating NRBTMG

Where: NRBTMG is Non-Retail Behind The Meter Generation

NRT is the Non-Retail Threshold

PJM NRBTMG is the total amount of Non-Retail Behind The Meter Generation in the PJM Region

The total amount of Non-Retail Behind The Meter Generation that is eligible for netting in the PJM Region is 3000 megawatts. Once this 3000 megawatt limit is reached, any additional Non-Retail Behind The Meter Generation which operates in the PJM Region will be ineligible for netting under this section.

In addition, the Network Customer NRBTMG Netting Credit shall be adjusted pursuant to Schedule 15 of this Tariff, if applicable.

A Network Customer shall be required to report to the Transmission Provider such information as is required to facilitate the determination of its NRBTMG Netting Credit in accordance with the procedures set forth in the PJM Manuals.

The annual peaks for purposes of the above calculation shall be determined from the twelve month period ending October 31 of the calendar year preceding the calendar year in which the billing month occurs. For new Network Load that was not connected to the Transmission System during such entire twelve month period, the Transmission Provider in coordination with

the affected Transmission Owners and electric distribution companies shall determine the appropriate peak load responsibility to be used until the annual peaks are determined for the next twelve month period ending October 31.

(b) Nothing herein shall entitle any Transmission Owner or Network Customer to establish a zone that is smaller than or a portion of a Zone set forth in Attachment J.

# 34.4 Redispatch Charge:

The Network Customer and each Transmission Owner shall pay any redispatch costs as set forth in Attachment K.

# 34.5 Stranded Cost Recovery:

Any 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 No. 888. However, the Transmission Owner must separately file any proposal to recover stranded costs under Section 205 of the Federal Power Act.

# 35 Operating Arrangements

# 35.1 Operation under The Network Operating Agreement:

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

## 35.2 Network Operating Agreement:

The terms and conditions under which the Network Customer shall operate its facilities and the technical and operational matters associated with the implementation of Part III of the Tariff shall be specified in the Network Operating Agreement. The Network Operating Agreement shall provide for the Parties and the Transmission Owners to (i) operate and maintain equipment necessary for integrating the Network Customer within the Transmission Provider's Transmission System (including, but not limited to, remote terminal units, metering, communications equipment and relaying equipment), (ii) transfer data between the Transmission Provider and the Network Customer (including, but not limited to, heat rates and operational characteristics of Network Resources, generation schedules for units outside the Transmission Provider's Transmission System, interchange schedules, unit outputs for redispatch required under Section 33, voltage schedules, loss factors and other real time data), (iii) use software programs required for data links and constraint dispatching, (iv) exchange data on forecasted loads and resources necessary for long-term planning, and (v) address any other technical and operational considerations required for implementation of Part III of the Tariff, including scheduling protocols. The Network Operating Agreement will recognize that the Network Customer shall either (i) operate as a Control Area under applicable guidelines of the Electric Reliability Organization (ERO) as defined in 18 C.F.R. § 39.1, (ii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with the Transmission Provider, or (iii) satisfy its Control Area requirements, including all necessary Ancillary Services, by contracting with another entity, consistent with Good Utility Practice, which satisfies the applicable reliability guidelines of the ERO. The Transmission Provider shall not unreasonably refuse to accept contractual arrangements with another entity for Ancillary Services. The Network Operating Agreement 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. For Network Customers serving load in the PJM Region, the Network Operating Committee shall be the Members Committee, or a sub-committee thereof, established under the PJM Operating Agreement.

#### IV. INTERCONNECTIONS WITH THE TRANSMISSION SYSTEM

References to section numbers in this Part IV refer to sections of this Part IV, unless otherwise specified.

#### Preamble

An Interconnection Customer that proposes to (i) interconnect a generating unit to the Transmission System in the PJM Region, (ii) increase the capacity of a generating unit in the PJM Region, (iii) interconnect Merchant Transmission Facilities with the Transmission System, (iv) increase the capacity of existing Merchant Transmission Facilities interconnected to the Transmission System, or (v) interconnect a generating unit to distribution facilities located in the PJM Region that are used for transmission of power in interstate commerce, and to make wholesale sales using the output of the generating unit shall request interconnection with the Transmission System pursuant to, and shall comply with, the terms, conditions, and procedures set forth in Part IV of the Tariff. Subpart G of Part IV of the Tariff and related portions of the PJM Manuals apply to Interconnection Requests involving new generation resources of 20 MW procedures, terms and conditions governing the Transmission Provider's administration of the New Services Queue, System Impact Studies and Facilities Studies of Interconnection Requests (as well as other New Service Requests), and agreements related to such studies and Interconnection Service. Each Interconnection Customer must pay for any Attachment Facilities, Local Upgrades, and Network Upgrades necessary to accommodate the requested interconnection.

# **Subpart A – INTERCONNECTION PROCEDURES**

# 36 Interconnection Requests

#### 36.1 General:

Generation Interconnection Requests and Transmission Interconnection Requests shall be governed by this Section 36.

## **36.1.01** Generation Interconnection Request:

Except as otherwise provided in this Subpart A with respect to Behind The Meter Generation, an Interconnection Customer that seeks to interconnect new generation in, or to increase the capacity of generation already interconnected in, the PJM Region shall submit to the Transmission Provider a Generation Interconnection Request. A Generation Interconnection Request shall include: (i) the location of the proposed generating unit site or existing generating unit; (ii) evidence of an ownership interest in, or right to acquire or control the generating unit site, such as a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider; (iii) the size of the proposed generating unit or the amount of increase in capacity of an existing generating unit; (iv) a description of the equipment configuration and if the generating unit is a wind generation facility, a set of preliminary electrical design specifications depicting the wind plant as a single equivalent generator; (v) the planned date the proposed generating unit or increase in capacity of an existing generating unit will be in service, such date to be no more than seven years from the date the request is received by the Transmission Provider unless the Generation Interconnection Customer demonstrates that engineering, permitting, and construction of the generating unit or increase in capacity will take more than seven years; and (vi) any additional information as may be prescribed by the Transmission Provider in the PJM Manuals; (vii) an executed Generation Interconnection Feasibility Study Agreement, a form of which is contained in Attachment N, pursuant to which the Generation Interconnection Customer agrees to reimburse the Transmission Provider for the cost of the Generation Interconnection Feasibility Study; (viii) an initial deposit of \$100 for each MW requested if the Generation Interconnection Request is received in the first calendar month of the current New Services Queue; an initial deposit in the amount of \$150 for each MW requested if the Generation Interconnection Request is received in the second calendar month of the current New Services Queue; or an initial deposit in the amount of \$200 for each MW requested, if the Generation Interconnection Request is received in the third calendar month of the current New Services Queue; provided, however, that the maximum initial deposit for a Generation Interconnection Request will be \$100,000 regardless of both the size and timing of such request; and (ix) a base non-refundable deposit of \$10,000, if the Generation Interconnection Request is received in the first calendar month of the current New Services Queue; a base non-refundable deposit of \$20,000 if the Generation Interconnection Request is received in the second calendar month of the current New Services Queue; or a base nonrefundable deposit of \$30,000, if the Generation Interconnection Request is received in the third calendar month of the current New Services Queue.

The base and initial deposit will be credited toward the amount of the Generation Interconnection Customer's cost responsibility for the Generation Interconnection Feasibility Study. Upon completion of the Feasibility Study, the Transmission Provider will return any unused refundable deposit monies to Interconnection Customer. Any remaining non-refundable deposit monies will be credited toward the Interconnection Customer's cost responsibility for any other studies

conducted for that Interconnection Request under Part VI of the Tariff, which will be applied prior to the deposit monies collected for that other study. If any non-refundable deposit monies remain after all studies are complete, such monies will be returned to a Generation Interconnection Customer upon Initial Operation, or to a Transmission Interconnection Customer upon energization of completed facilities as provided in Attachment GG, Appendix III, Section 20 of the Tariff. The Transmission Provider shall maintain on the Transmission Provider's website a list of all Generation Interconnection Requests that identifies (A) the proposed maximum summer and winter megawatt electrical output; (B) the location of the generation by county and state; (C) the station or transmission line or lines where the interconnection will be made; (D) the facility's projected date of Initial Operation; (E) the status of the Generation Interconnection Request, including its Queue Position; (F) the type of Generation Interconnection Service requested; (G) the availability of any studies related to the Interconnection Request; (H) the date of the Generation Interconnection Request; (I) the type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); and (J) for each Generation Interconnection Request that has not resulted in a completed interconnection, an explanation of why it was not completed. This list will not disclose the identity of the Generation Interconnection Customer, except as otherwise provided in Part IV of the Tariff. The list and the priority of Generation Interconnection Requests shall be included on the website as part of the New Services Queue.

## 36.1.02 Generation Interconnection Requests of 20 Megawatts or Less:

The Transmission Provider has developed streamlined processes for Generation Interconnection Requests involving new generation resources of 20 MW or less and increases in the capacity of a generating unit by 20 MW or less over any consecutive 24-month period. The processes for Generation Interconnection Requests involving increases in capacity by 20 MW or less are set forth in Subpart G of Part IV of the Tariff and the PJM Manuals.

#### 36.1.03 Transmission Interconnection Request:

An Interconnection Customer that seeks to interconnect or add Merchant Transmission Facilities to the Transmission System, or to increase the capacity of existing Merchant Transmission Facilities interconnected with the Transmission System, or to advance the construction of any transmission enhancement or expansion other than Merchant Transmission Facilities that is included in the Regional Transmission Expansion Plan prepared pursuant to Schedule 6 of the Operating Agreement, shall submit to the Transmission Provider a Transmission Interconnection Request. A Transmission Interconnection Request shall include: (i) the location of the proposed Merchant Transmission

Facilities and of the substation(s) or other location(s) where the Transmission Interconnection Customer proposes to interconnect or add its Merchant Transmission Facilities to the Transmission System; (ii) a description of the proposed Merchant Transmission Facilities; (iii) the nominal capability or increase in capability (in megawatts) of the proposed Merchant Transmission Facilities or planned increase in the capability of the existing facilities on which any proposed Merchant Network Upgrades would be installed; (iv) the planned date the proposed Merchant Transmission Facilities will be in service, such date to be no more than seven

years from the date the request is received by the Transmission Provider, unless the Transmission Interconnection Customer demonstrates that engineering, permitting, and construction of the Merchant Transmission Facilities will take more than seven years; (v) if the request relates to proposed Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that will interconnect with the Transmission System and with another control area outside the PJM Region, the Transmission Interconnection Customer's election to receive either (a) Transmission Injection Rights and/or Transmission Withdrawal Rights, or (b) Incremental Deliverability Rights, Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Available Transfer Capability Revenue Rights, associated with the capability of the proposed Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities; (vi) if the Transmission Interconnection Customer will be eligible to receive Incremental Deliverability Rights under Section 235 of the Tariff, identification of the point on the Transmission System where the Transmission Interconnection Customer wishes to receive Incremental Deliverability Rights created by the construction or installation of its proposed Merchant Transmission Facilities; (vii) any additional information as may be prescribed by the Transmission Provider in the PJM Manuals; (viii) an executed Transmission Interconnection Feasibility Study Agreement, a form of which is contained in Attachment S, pursuant to which the Transmission Interconnection Customer agrees to reimburse the Transmission Provider for the cost of the Transmission Interconnection Feasibility Study; and (ix) an initial deposit in the amount of \$100 for each MW requested if the Transmission Interconnection Request is received in the first calendar month of the current New Services Queue; an initial deposit in the amount of \$150 for each MW requested if the Transmission Interconnection Request is received within the second calendar month of the current New Services Queue; or an initial deposit in the amount of \$200 for each MW requested, if the Transmission Interconnection Request is received within the third calendar month of the current New Services Queue; provided, however, that the maximum initial deposit for a Transmission Interconnection Request will be \$100,000 regardless of both size and timing of such request; and (x) a base non-refundable deposit in the amount of \$10,000, if the Transmission Interconnection Request is received within the first calendar month of the date of the beginning of the current New Services Queue; a base non-refundable deposit in the amount of \$20,000 if the Transmission Interconnection Request is received within the second calendar month of the current New Services Queue; or a base non-refundable deposit in the amount of \$30,000, if the Transmission Interconnection Request is received within the third calendar month of the current New Services Queue,

The base and initial deposit will be credited toward the amount of the Transmission Interconnection Customer's cost responsibility for the Transmission Interconnection Feasibility Study and other studies conducted under Part IV or Part VI of the Tariff. The Transmission Provider shall maintain on the Transmission Provider's OASIS a list of all Transmission Interconnection Requests that identifies (A) in megawatts the potential nominal capability or increase in capability; (B) the location of the Merchant Transmission Facilities by county and state; (C) the station or transmission line or lines where the interconnection will be made; (D) the facility's projected date of Initial Operation; (E) the status of the Transmission Interconnection Request, including its Queue Position; (F) the availability of any studies related to the Interconnection Request; (G) the date of the Transmission Interconnection Request; (H) the type of Merchant Transmission Facilities to be constructed; and (I) for each Transmission

Interconnection Request that has not resulted in a completed interconnection, an explanation of why it was not completed. This list will not disclose the identity of the Transmission Interconnection Customer, except as otherwise provided in Part IV or Part VI of the Tariff. The list and the priority of Transmission Interconnection Requests shall be included on the OASIS as a part of the New Services Queue.

Within 30 days of submitting its Interconnection Request, Transmission Interconnection Customer shall provide evidence that it has submitted a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting, if applicable. Transmission Interconnection Customer shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM interconnection process.

#### 36.1.1 Interconnection Services for Generation:

Generation Interconnection Customers may request either of two forms of Interconnection Service, i.e., interconnection as a Capacity Resource or as an Energy Resource. Energy Resource status allows the generator to participate in the PJM Interchange Energy Market pursuant to the PJM Operating Agreement. Capacity Resource status allows the generator to participate in the PJM Interchange Energy Market to be utilized by load-serving entities in the PJM Region to meet capacity obligations imposed under the Reliability Assurance Agreement and/or to be designated as a Network Resource under Part III. Capacity Resources also may participate in Reliability Pricing Model Auctions and in Ancillary Services markets pursuant to the PJM Tariff or the Operating Agreement. Capacity Resource status is based on providing sufficient transmission capability to ensure deliverability of generator output to the aggregate PJM Network Load and to satisfy various contingency criteria established by the Applicable Regional Reliability Council in which the generator is located. Specific tests performed during the Generation Interconnection Feasibility Study and later System Impact Study will identify those upgrades required to satisfy the contingency criteria applicable at the generator's location.

Consistent with Section 1.7.4(i) of Schedule 1 to the Operating Agreement, to the extent its generating facility is dispatchable, an Interconnection Customer shall submit an Economic Minimum in the real-time market that is no greater than the higher of its physical operating minimum or its Capacity Interconnection Rights.

#### 36.1.2 No Applicability to Transmission Service:

Nothing in this Part IV shall constitute a request for transmission service, or confer upon an Interconnection Customer any right to receive transmission service, under Part II or Part III.

## 36.1.3 Acknowledgement of Interconnection Request:

The Transmission Provider shall acknowledge receipt of the Interconnection Request (electronically when available to all parties, otherwise written) within five (5) business days after receipt of the request and shall attach a copy of the received Interconnection Request to the acknowledgement.

## 36.1.4 Deficiencies in Interconnection Request:

An Interconnection Request will not be considered a valid request if Interconnection Customer has failed to pay any outstanding invoices related to prior Interconnection Requests by the Interconnection Customer and until all information required under Section 36.1 has been received by the Transmission Provider. If an Interconnection Request fails to meet the requirements set forth in Section 36.1 or is in arrears as described above, the Transmission Provider shall so notify the Interconnection Customer (electronically when available to all parties, otherwise written) within five (5) business days of receipt of the initial Interconnection Request. Such notice shall explain that the Interconnection Request does not constitute a valid request and the reasons for such failure to meet the applicable requirements. Interconnection Customer shall provide the additional information that Transmission Provider's notice identifies as needed to constitute a valid request and shall make any payments on any outstanding invoices within ten (10) business days after receipt of such notice. Upon timely correction of the deficiency, the Interconnection Request shall be assigned a Queue Position under Section 201 as of the date that Transmission Provider first received the request. In the event the Interconnection Customer fails to provide the further information and make payments on any outstanding invoices required by Transmission Provider's deficiency notice under this Section 36.1.4, its Interconnection Request shall be deemed to be terminated and withdrawn.

## 36.1.5 Scoping Meeting:

Transmission Provider shall provide each Interconnection Customer with an opportunity for a scoping meeting among the Transmission Provider, the prospective Interconnected Transmission Owner and the Interconnection Customer. The purpose of the scoping meeting will be to identify one alternative Point(s) of Interconnection and configurations to evaluate in the Interconnection Studies and to attempt to select the best alternatives in a reasonable fashion given resources and information available. The Interconnection Customer may select a maximum of two Point(s) of Interconnection to be studied during the Interconnection Feasibility Study, a primary and secondary Point of Interconnection may be selected by the Interconnection Customer. After receipt of a valid Interconnection Request, Transmission Provider shall offer to arrange, within seven business days, for the scoping meeting, and shall provide a minimum of three suggested meeting dates and times for the scoping meeting. The scoping meeting shall be held, or waived by mutual agreement of the parties within 45 days after receipt of a valid Interconnection Request, if the Interconnection Request is received in the first calendar month of the current New Services Queue; or within 30 days if the Interconnection Request is received within the second calendar month of the current New Services Queue; or in 20 days if the Interconnection Request is received in the third calendar month of the date of the beginning of the current New Services Queue. The Interconnection Customer may choose to divide the scoping meeting into two sessions, one between the Transmission Provider and Interconnection Customer and one among Transmission Provider, the Interconnection Customer and the prospective Interconnected Transmission Owner. Such meetings may be held consecutively on the same day. Scoping meetings may be held in person or by telephone or video conference. In the event the Interconnection Customer fails to waive or complete the scoping meeting requirement, its Interconnection Request shall be deemed to be terminated and withdrawn.

## 36.1.6 Coordination with Affected Systems:

The Transmission Provider will coordinate with Affected System Operators the conduct of any required studies in accordance with Section 202.

#### 36.1.7 Base Case Data:

Transmission Provider shall provide Interconnection Customer with base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list upon request and subject to the confidentiality provisions of Section 223 of the Tariff. Transmission Provider may require Interconnection Customer to sign a confidentiality agreement before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (1) generation projects and (ii) transmission projects, including merchant transmission projects, that are included in the then-current, approved Regional Transmission Expansion Plan.

#### 36.1A Behind The Meter Generation:

The following provisions shall apply with respect to Behind The Meter Generation:

#### **36.1A.1** Generation Interconnection Requests:

Any Behind The Meter Generation that desires to be designated, in whole or in part, as a Capacity Resource or Energy Resource must submit a Generation Interconnection Request.

## 36.1A.2 Information Required in Generation Interconnection Requests:

In addition to the information described in Section 36.1 of the Tariff, a Generation Interconnection Request for Behind The Meter Generation shall include (1) the type and size of the load located (or to be located) at the site of such generation; (2) a description of the electrical connections between the generation facility and the load; and (3) the amount of the facility's generating capacity for which the customer seeks Capacity Interconnection Rights or that will be an Energy Resource. The amount of capacity included in the election pursuant to section (3) of the preceding sentence may be reduced, but shall not be increased, during the interconnection study process in accordance with any rules and procedures stated in the PJM Manuals.

#### 36.1A.3 Small Generation Classification:

The amount of generating capacity of Behind The Meter Generation that the Generation Interconnection Customer identifies in its Generation Interconnection Request as the capacity that it wishes to be a Capacity Resource or Energy Resource shall determine whether Subpart A or Subpart G of Part IV will apply to such Generation Interconnection Request.

#### 36.1A.4 Transmission Provider Determination:

Prior to commencing any Interconnection Studies related to a Generation Interconnection Request involving facilities described as Behind The Meter Generation, Transmission Provider shall determine, based on the information included in the Generation Interconnection Request and any other information requested and obtained from the Generation Interconnection Customer, whether the generating facility or expansion involved in the Generation Interconnection Request appears to meet the definition of Behind The Meter Generation in the Tariff. In the event that Transmission Provider finds that the subject project does not meet the definition of Behind The Meter Generation, it shall so notify the Generation Interconnection Customer and, for all purposes of Part IV and Part VI, shall thereafter deem the customer's Generation Interconnection Request to include the full generating capacity of the facility or expansion to which the request relates.

#### 36.1A.5 Treatment As Energy Resource:

Any portion of the capacity of Behind The Meter Generation that a Generation Interconnection Customer identifies in its Generation Interconnection Request as capacity that it seeks to utilize,

directly or indirectly, in Wholesale Transactions, but for which the customer does not seek Capacity Resource status, shall be deemed to be an Energy Resource.

## 36.1A.6 Operation as Capacity Resource:

To the extent that a Generation Interconnection Customer that owns or operates generation facilities that otherwise would be classified as Behind The Meter Generation elects, in accordance with Section 2.5 at Appendix 2 of the form of Interconnection Service Agreement (set forth in Attachment O to the Tariff), to operate such facilities as a Capacity Resource, the provisions of the Tariff regarding Behind The Meter Generation shall not apply to such generation facilities for the period such election is in effect.

#### 36.1A.7 Other Requirements:

Behind The Meter Generation for which a Generation Interconnection Request is not required under Part IV may be subject to other interconnection-related requirements of a Transmission Owner or Electric Distributor with which the generation facility will be interconnected.

#### 36.2 Interconnection Feasibility Study:

After receiving an Interconnection Request, a signed Generation Interconnection Feasibility Study Agreement or Transmission Interconnection Feasibility Study Agreement, as applicable, and the applicable deposit contained in Sections 36.1.01, 36.1.03, 110.1, 111.1, and 112.1 of the Tariff from the Interconnection Customer, and, if applicable, subject to the terms of Section 36,1A.5, the Transmission Provider shall conduct an Interconnection Feasibility Study to make a preliminary determination of the type and scope of Attachment Facilities, Local Upgrades, and Network Upgrades that will be necessary to accommodate the Interconnection Request and to provide the Interconnection Customer a preliminary estimate of the time that will be required to construct any necessary facilities and upgrades and the Interconnection Customer's cost responsibility, estimated consistent with Section 217 of the Tariff. The Interconnection Feasibility Study assesses the practicality and cost of accommodating interconnection of the generating unit or increased generating capacity with the Transmission System. The analysis is limited to load-flow analysis of probable contingencies and, for Generation Interconnection Requests, short-circuit studies. This study also focuses on determining preliminary estimates of the type, scope, cost and lead time for construction of facilities required to interconnect the project. For a Generation Interconnection Customer, the Interconnection Feasibility Study may provide separate estimates of necessary facilities and upgrades and associated cost responsibility reflecting the generating facility being designated as either a Capacity Resource or an Energy Resource. The study for the primary Point of Interconnection will be conducted as a cluster, within the project's New Services Queue. The study for the secondary Point of Interconnection will be conducted as a sensitivity analysis. The Transmission Provider shall provide a copy of the Interconnection Feasibility Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in Section 18.17 of the Operating Agreement, related work papers to the Interconnection Customer and the affected Transmission Owner(s). Upon completion, the Transmission Provider shall list the study and the date of the Interconnection Request to which it pertains on the Transmission Provider's OASIS. To the extent required by Commission regulations, the Transmission Provider shall make the completed Interconnection Feasibility Study publicly available upon request, except that the identity of the Interconnection Customer shall remain confidential. The Transmission Provider shall conduct Interconnection Feasibility Studies four times each year. For Interconnection Requests received during the three-month period ending January 31 the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by April 30. For Interconnection Requests received during the three-month period ending April 30 the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by July 31. Interconnection Requests received during the three-month period ending July 31 the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by October 31. For Interconnection Requests received during the three-month period ending October 31 the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by January 31. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

#### 36.2.1 Substitute Point:

If the Interconnection Feasibility Study reveals any result(s) not reasonably expected at the time of the Scoping Meeting, a substitute Point of Interconnection identified by the Interconnection Customer, Transmission Provider, or the Interconnected Transmission Owner, and acceptable to the others, but which would not be a Material Modification, will be substituted for the Point of Interconnection identified in the Interconnection Feasibility Study Agreement. The substitute Point of Interconnection will be effected without loss of Queue Position and will be utilized in the ensuing System Impact Study.

## 36.2.2 Meeting with Transmission Provider:

At the Interconnection Customer's request, Transmission Provider, the Interconnection Customer and the Interconnected Transmission Owner shall meet at a mutually agreeable time to discuss the results of the Interconnection Feasibility Study. Such meeting may occur in person or by telephone or video conference.

### 36.2.3 Re-Study.

If a re-study of the Interconnection Feasibility Study is required due to a higher queued project dropping out of the queue, a modification of a higher queued project subject to 36.2A, or redesignation of the Point of Interconnection pursuant to Section 36.2.1, the Transmission Provider shall notify the Interconnection Customer in writing explaining the reason for the re-study. Transmission Provider shall use due diligence to complete such re-study within forty-five (45) calendar days from the date of the notice. Any cost of re-study shall be borne by the Interconnection Customer being restudied.

#### 36.2A Modification of Interconnection Request:

The Interconnection Customer shall submit to the Transmission Provider, in writing, any modification to its project that causes the project's capacity, location, or configuration to differ from any corresponding information provided in the Interconnection Request. Interconnection Customer shall retain its Queue Position if the modification is in accordance with Sections 36.2A.1, 36.2A.2 or 36.2A.5, or is determined not to be a Material Modification pursuant to Section 36.2A.3. Notwithstanding the above, during the course of the Interconnection Studies, the Interconnection Customer, the Interconnected Transmission Owner, or Transmission Provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the Transmission Provider and Interconnection Customer, such acceptance not to be unreasonably withheld, Transmission Provider shall modify the project's Point of Interconnection, capacity, and/or configuration in accordance with such changes and shall proceed with any re-studies that Transmission Provider finds necessary in accordance with Sections 205.5 and/or 207.2, as applicable, provided, however, that a change to the Point of Interconnection shall be permitted without loss of Queue Position only if it would not be a Material Modification.

#### 36.2A.1

Prior to return of the executed System Impact Study Agreement to the Transmission Provider, an Interconnection Customer may modify its project to reduce by up to 60 percent the electrical output (MW) (in the case of a Generation Interconnection Request) or by up to 60 percent of the transmission capability (in the case of a Transmission Interconnection Request) of the proposed project. For increases in generating capacity or transmission capability, the Interconnection Customer must submit a new Interconnection Request for the additional capability and shall be assigned a new Queue Position for the additional capability.

#### 36.2A.2

After the System Impact Study Agreement is executed and prior to execution of the Interconnection Service Agreement, an Interconnection Customer may modify its project to reduce the electrical output (MW) (in the case of a Generation Interconnection Request) or the transmission capability (in the case of a Transmission Interconnection Request) of the proposed project by up to the larger of 20 percent of the capability considered in the System Impact Study or 50 MW.

#### 36.2A.3

Prior to making any modifications other than those specifically permitted by Sections 36.2A.1, 36.2A.2 and 36.2A.5, the Interconnection Customer may first request that the Transmission Provider evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the Transmission Provider shall evaluate the proposed modifications prior to making them and shall inform the Interconnection Customer in writing of

whether the modification(s) would constitute a Material Modification. For purposes of this Section 36.2A.3, any change to the Point of Interconnection (other than a change deemed acceptable under Sections 36.1.5, 36.2.1, or 36.2A.1) or increase in generating capacity shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

#### 36.2A.4

Upon receipt of the Interconnection Customer's request for modification under Section 36.2A.3, the Transmission Provider shall commence and perform any necessary additional studies as soon as practicable, but, except as otherwise provided in this Subpart A, the Transmission Provider shall commence such studies no later than thirty (30) calendar days after receiving notice of the Interconnection Customer's request. Any additional studies resulting from such modification shall be done at the Interconnection Customer's expense. Transmission Provider may require the Interconnection Customer to pay the estimated cost of such studies in advance.

#### 36.2A.5

Extensions of less than three (3) cumulative years in the projected date of Initial Operation of the Customer Facility are not material and shall be handled through construction sequencing.

## 37 Additional Procedures:

Upon completion of the Interconnection Feasibility Study, the Transmission Provider shall tender affected Interconnection Customers a System Impact Study Agreement pursuant to Part VI. The procedures and other terms of Part VI shall apply to the System Impact Study and subsequent analysis of Interconnection Requests.

#### 38 Service on Merchant Transmission Facilities:

- (a) A Transmission Interconnection Customer that will be a Merchant Transmission Provider shall:
- (1) at least 90 days prior to the anticipated date of commencement of Interconnection Service under its Interconnection Service Agreement, provide the Transmission Provider with terms and conditions for reservation, interruption and curtailment priorities for firm and non-firm transmission service on the Merchant Transmission Provider's Merchant Transmission Facilities. Such terms and conditions shall be non-discriminatory and shall be consistent with the terms of the Commission's approval of the Merchant Transmission Provider's right to charge negotiated (market-based) rates for service on its Merchant Transmission Facilities. Transmission Provider shall post such terms and conditions applicable to service on the Merchant Transmission Facilities on its OASIS and shall file them with the Commission as a separate service schedule under the Tariff, with a proposed effective date on or before the anticipated date of commencement of Interconnection Service for the affected Transmission Interconnection Customer; and (2) at least 15 days prior to the anticipated date of commencement of Interconnection Service for Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, provide the Transmission Provider with the results of a Commission-approved process for allocation of Transmission Injection Rights and Transmission Withdrawal Rights associated with such Merchant Transmission Provider's Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, and with a listing of any Transmission Injection Rights and/or Transmission Withdrawal Rights not allocated in such process. Transmission Provider shall post such information on its OASIS.
- (b) Should the Merchant Transmission Provider fail to provide the Transmission Provider with the terms and conditions for service on the Merchant Transmission Provider's Merchant Transmission Facilities required under subsection (a)(1) of this section, firm and non-firm transmission service on such Merchant Transmission Facilities shall be subject to the terms and conditions regarding reservation, interruption and curtailment priorities applicable to Firm or Non-Firm Point-to-Point Transmission Service on the Transmission System.
- (c) Except as otherwise provided under this Section 38, transmission service on, and operation of, Merchant Transmission Facilities shall be subject to the terms and conditions (including in particular, but not limited to, those relating to Transmission Provider's authority in the event of an emergency) applicable to Transmission Service under the Tariff and the Operating Agreement.

## 39 Local Furnishing Bonds

### Transmission Owners That Own Facilities Financed by Local Furnishing Bonds:

This provision is applicable only to an Interconnected 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 Part IV or Part VI, Transmission Provider shall not be required to provide Interconnection Service to Interconnection Customer pursuant to Part IV or Part VI if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Interconnected Transmission Owner's facilities that would be used in providing such Interconnection Service.

## 39.2 Alternative Procedures for Requesting Interconnection Service:

An Interconnected Transmission Owner that believes the provision of Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Interconnected Transmission Owner's facilities that would be used in providing such Interconnection Service, it shall so notify Transmission Provider within 30 days after the Transmission Owner receives a copy of the Interconnection Customer's Interconnection Request. If Transmission Provider determines that the provision of Interconnection Service requested by Interconnection Customer would jeopardize the tax-exempt status of the Interconnected Transmission Owner's local furnishing bonds, it shall so advise the Interconnection Customer within thirty (30) days after receipt of notice of such jeopardy from the affected Interconnected Transmission Owner. Interconnection Customer thereafter may renew its request for interconnection using the process specified in Section 5.2(ii) of the Tariff.

## 40 - 109 [Reserved.]

## Subpart B – [Reserved.]

## Subpart C - [Reserved.]

## Subpart D - [Reserved.]

## Subpart E – [Reserved.]

## Subpart F - [Reserved.]

#### Subpart G – SMALL GENERATION INTERCONNECTION PROCEDURE

#### Preamble

Requests for the interconnection of new generation resources of 20 MW or less or increases of 20 MW or less to the capability of existing generation resources may be processed, pursuant to the applicable provisions of Section 36 of the PJM Tariff, and through the expedited procedures set forth in this Subpart G. This Subpart G describes procedures for the following categories of "small resource" additions: permanent Capacity Resource additions of 20 MW or less, permanent Energy Resource additions of 20 MW or less but greater than 2 MW, temporary Energy Resource additions of 20 MW or less but greater than 2 MW, permanent and temporary Energy Resource additions of 2 MW or less, and certified small inverter-based facility additions no larger than 10 kW. Part VI of the Tariff contains the procedures, terms and conditions that govern, in general, the Transmission Provider's administration of the New Services Queue, System Impact Studies and Facilities Studies of Interconnection Requests, and agreements related to such studies and Interconnection Service, except as otherwise provided in this Subpart G of Part IV of the Tariff.

## 110 Permanent Capacity Resource Additions Of 20 MW Or Less

This section describes procedures related to the submission and processing of Generation Interconnection Requests related to (a) new generation resources of 20 MW or less, or (b) the increase in capability, by 20 MW or less over any period of 24 consecutive months, of an existing generation resource, for which Capacity Interconnection Rights are to be granted. Such resources may participate in the PJM energy and capacity markets and may, therefore, be used by load serving entities to meet capacity obligations imposed under the PJM Reliability Assurance Agreement. These procedures apply to generation resources which, when connected to the system, are expected to remain connected to the system for the normal life span of such a generation resource. These procedures do not apply to resources that are specifically being connected to the system temporarily, with the expectation that they will later be removed.

## 110.1 Application

The Generation Interconnection Customer desiring the interconnection of a new Generation Capacity Resource of 20 MW or less or the increase in capacity, by 20 MW or less, of an Existing Generation Capacity Resource, must submit a completed Attachment N – Form of Generation Interconnection Feasibility Study Agreement. Attachment N of the PJM Tariff may be found on the PJM web site at and must be submitted to Transmission Provider.

All requirements related to the submission, for a larger resource, of an Attachment N application must be satisfied for a capacity addition of 20 MW or less, including (i) an initial deposit in the amount of \$100 for each MW requested if the Generation Interconnection Request is received within the first calendar month of the current New Services Queue; an initial deposit in the amount of \$150 for each MW requested if the Generation Interconnection Request is received within the second calendar month of the current New Services Queue; or an initial deposit in the amount of \$200 for each MW requested, if the Generation Interconnection Request is received within the third calendar month of the current New Services Queue; and (ii) a base non-refundable deposit in the amount of \$1,000, if the Generation Interconnection Request is received within the first calendar month of the current New Services Queue; a base non-refundable deposit in the amount of \$2,000 if the Generation Interconnection Request is received within the second calendar month of the current New Services Queue; or a base non-refundable deposit of \$3,000, if the Generation Interconnection Request is received within the third calendar month of the current New Services Queue.

The base and initial per MW deposit received will be credited toward the Generation Interconnection Customer's cost responsibility for the Generation Interconnection Feasibility Study. Upon completion of the Feasibility Study, the Transmission Provider will return any unused refundable deposit monies to Interconnection Customer. Any remaining non-refundable deposit monies will be credited toward the Interconnection Customer's cost responsibility for any other studies conducted for that Interconnection Request under Part VI of the Tariff, which will be applied prior to the deposit monies collected for that other study. If any non-refundable deposit monies remain after all studies are complete, such monies will be returned to a Generation Interconnection Customer upon Initial Operation, or to a Transmission Interconnection Customer upon energization of completed facilities as provided in Attachment GG, Appendix III, Section 20 of the Tariff. The Generation Interconnection Customer is responsible for all actual costs associated with the processing of the request and the performance of the Feasibility Study related to the request and will be billed for such costs following the completion of the Feasibility Study.

Documentation of site control must be submitted, for small resource additions, with the completed Attachment N. Site control may be demonstrated through an exclusive option to purchase the property on which the generation project is to be developed, a property deed, or a range of tax or corporate documents that identify property ownership. Site control must either be in the name of the party submitting the generation interconnection request or documentation must be provided establishing the business relationship between the project developer and the party having site control.

All information required in the completed Attachment N related to the generating project site, Point of Interconnection, and generating unit size and configuration must be provided.

Once it has been established that the requirements related to the submission of the Attachment N application have been met, the Generation Interconnection Request will be entered into the then current New Services Queue for analysis. The generation addition project will be identified in the New Services Queue on the PJM web site by the size of the capacity addition and by its proposed Point of Interconnection on the PJM system.

Effective Date: 2/18/2012 - Docket #: ER12-636-000

### 110.2 Feasibility Study

Feasibility Study analyses can generally be expedited by examining a limited contingency set that focuses on the impact of the small capacity addition on contingency limits in the vicinity of the Generation Capacity Resource. Linear analysis tools are used to evaluate the impact of a small capacity addition with respect to compliance with Applicable Regional Reliability Council contingency criteria. Generally, small capacity additions will have very limited and isolated impacts on system facilities. If criteria violations are observed, further AC testing is required.

Short circuit calculations are performed for small resource additions to ensure that circuit breaker capabilities are not exceeded.

Once the Feasibility Study is completed, a Feasibility Study report will be prepared and transmitted to the Interconnection Customer along with a System Impact Study Agreement. In order to remain in the New Services Queue, the Interconnection Customer must return the executed System Impact Study Agreement within 30 days, along with documents demonstrating that an initial air permit application has been filed, if required, and the deposit contained in Section 204.3A of the Tariff. In some cases, where no network impacts are identified and there are no other projects in the vicinity of the small resource addition, the System Impact Study may not be required and the project will proceed directly to the Facilities Study.

#### 110.3 System Impact Study

As with the Feasibility Study, expedited analysis procedures will be utilized, where appropriate, in the course of the System Impact Study.

Load deliverability will only be evaluated for sub-areas where margins are known to be limited. In most cases, the addition of small *Generation* Capacity Resources will improve local deliverability margins. However, if sub-area margins are known to be limited, the impact of the new resource will be evaluated based on its impact on the contingencies limiting emergency imports to the sub-area.

Generation deliverability is tested using linear analysis tools. In most cases, small capacity additions will have no impact on generator deliverability in an area. If violations are observed, more detailed testing using AC tools is required.

Stability analysis is generally not performed for small capacity additions. If the capacity of an existing generating resource is increased by 20 MW or less, stability will be evaluated for critical contingencies only if existing stability margins are small. New *Generation* Capacity Resources of 20 MW or less will only be evaluated if they are connected at a location where stability margins associated with existing resources are small.

Short circuit calculations are performed during the System Impact Study for small resource additions, taking into consideration all elements of the regional plan, to ensure that circuit breaker capabilities are not exceeded.

Once the System Impact Study is completed, a System Impact Study report will be prepared and transmitted to the Interconnection Customer along with a Facilities Study Agreement. In order to remain in the New Services Queue, the Interconnection Customer must return the executed Facilities Study Agreement within 30 days, along with a deposit in the amount of the estimated cost of the Facilities Study. The Interconnection Customer is responsible for all actual costs associated with the performance of the Facilities Study related to the request and will be billed for such costs following the completion of the Facilities Study. If no transmission system facilities are required, the Facilities Study may not be required and the project will proceed directly to the execution of an Interconnection Service Agreement.

#### 110.4 Facilities Study

As with larger generation projects, transmission facilities design for any required Attachment Facilities, Local Upgrades and/or Network Upgrades will be performed through the execution of a Facilities Study Agreement between the Interconnection Customer and Transmission Provider. Transmission Provider may contract with consultants, including the Interconnected Transmission Owners, or contractors acting on their behalf, to perform the bulk of the activities required under the Facilities Study Agreement. In some cases, the Interconnection Customer and Transmission Provider may reach agreement allowing the Interconnection Customer to separately arrange for the design of some of the required transmission facilities. In such cases, facilities design will be reviewed, under the Facilities Study Agreement, by the Interconnected Transmission Owner.

Facilities design for small capacity additions will be expedited to the extent possible. In most cases, few or no Network Upgrades will be required for small capacity additions. Attachment Facilities, for some small capacity additions, may, in part, be elements of a "turn key" installation. In such instances, the design of "turn key" attachments will be reviewed by the Interconnected Transmission Owners or their contractors.

## 110.5 Interconnection Service Agreement

As with larger generation projects, an Interconnection Service Agreement must be executed and filed with the FERC. The Interconnection Service Agreement identifies the obligations, on the part of the Interconnection Customer, to pay for transmission facilities required to facilitate the interconnection and the Capacity Interconnection Rights which are awarded to the *Generation* Capacity Resource.

In general, the execution of an Interconnection Service Agreement is no different for capacity additions of 20 MW or less than for larger Generation Capacity Resources. However, in instances where an increase of 20 MW or less to an Existing Generation Capacity Resource can be put in service immediately, a modified Interconnection Service Agreement may be executed. If such an increase is expedited through the System Impact Study phase, ahead of larger projects already in the New Services Queue, an Interconnection Service Agreement will be executed granting interim Capacity Interconnection Rights. These interim rights will allow the capacity increase to be implemented and the resource to participate in the capacity market until studies have been completed for earlier queued resources and all related obligations have been defined. At such time, the interim rights awarded the smaller capacity addition will become dependent on the construction of any required transmission facilities and the satisfaction of any financial obligations for those facilities. If, once those obligations are defined, the smaller capacity addition desires to retain the interim Capacity Interconnection Rights; a new Interconnection Service Agreement will be executed.

If a new Generation Capacity Resource of 20 MW or less can be quickly connected to the system, interim Capacity Interconnection Rights can be awarded, as above, through the execution of a modified Interconnection Service Agreement.

Effective Date: 2/18/2012 - Docket #: ER12-636-000

## 110.6 Other Requirements

Requirements and application procedures related to PJM membership are specified in the PJM Manuals. Additionally, the PJM Manuals detail a range of operational requirements for generation owners related to, among other things, the need for control center facilities and modelling in the PJM Energy Management System and unit commitment tools.

## 111 Permanent Energy Resource Additions Of 20 MW Or Less But Greater Than 2MW

This section describes procedures related to the submission and processing of requests related to the interconnection of new generation resources of 20 MW or less but greater than 2 MW or the increase in capability of 20 MW or less but greater than 2 MW of an existing generation resource, for which Capacity Interconnection Rights will not be granted. Such resources may participate in the PJM energy markets, but not in the PJM capacity markets. They may, therefore, not be used by load serving entities to meet capacity obligations imposed under the PJM Reliability Assurance Agreement. These procedures apply to generation resources which, when connected to the system, are expected to remain connected to the system for the normal life span of such a generation resource. These procedures do not apply to resources that are specifically being connected to the system temporarily, with the expectation that they will later be removed.

### 111.1 Application

The Interconnection Customer desiring the interconnection of a new Energy Resource of 20 MW or less but greater than 2 MW or the increase in capability, by 20 MW or less but greater than 2 MW of an existing resource, must submit a completed Attachment N – Form of Generation Interconnection Feasibility Study Agreement. Attachment N of the PJM Tariff may be found on the PJM web site at http://pjm.com/planning/rtep-development/expansion-plan-process/form-attachment-n.aspx and must be submitted to Transmission Provider.

All requirements related to the submission, for a larger resource, of an Attachment N application must be satisfied for a capability addition of 20 MW or less but greater than 2 MW, including (i) an initial deposit amount of \$100 for each MW requested if the Generation Interconnection Request is received within the first calendar month of the date of the beginning of the current New Services Queue; an initial deposit amount of \$150 for each MW requested if the Generation Interconnection Request is received within the second calendar month of the date of the beginning of the current New Services Queue; or an initial deposit in the amount of \$200 for each MW requested, if the Generation Interconnection Request is received within the third calendar month of the current New Services Queue; and (ii) a base non-refundable deposit amount of \$1,000, if the Generation Interconnection Request is received within the first calendar month of the current New Services Queue; a base non-refundable deposit in the amount of \$2,000 if the Generation Interconnection Request is received within the second calendar month of the current New Services Queue; or a base non-refundable deposit in the amount of \$3,000, if the Generation Interconnection Request is received within the third calendar month of the current New Services Queue; or a base non-refundable deposit in the amount of \$3,000, if the Generation Interconnection Request is received within the third calendar month of the current New Services Queue; or a base non-refundable deposit in the amount of \$3,000, if

The base and initial per MW deposit received will be credited toward the Generation Interconnection Customer's cost responsibility for the Generation Interconnection Feasibility Study. Upon completion of the Feasibility Study, the Transmission Provider will return any unused refundable deposit monies to Interconnection Customer. Any remaining non-refundable deposit monies will be credited toward the Interconnection Customer's cost responsibility for any other studies conducted for that Interconnection Request under Part VI of the Tariff, which will be applied prior to the deposit monies collected for that other study. If any non-refundable deposit monies remain after all studies are complete, such monies will be returned to a Generation Interconnection Customer upon Initial Operation, or to a Transmission Interconnection Customer upon energization of completed facilities as provided in Attachment GG, Appendix III, Section 20 of the Tariff. The Generation Interconnection Customer is responsible for all actual costs associated with the processing of the request and the performance of the Feasibility Study related to the request and will be billed for such costs following the completion of the Feasibility Study.

#### 111.2 Feasibility Study

Feasibility Study analyses can generally be expedited by examining a limited contingency set that focuses on the impact of the small Energy Resource addition on contingency limits in the vicinity of the resource. Linear analysis tools are used to evaluate the impact of a small Energy Resource addition with respect to compliance with Applicable Regional Reliability Council contingency criteria. Generally, small resource additions will have very limited and isolated impacts on system facilities. If criteria violations are observed, further AC testing is required.

Short circuit calculations are performed for small resource additions to ensure that circuit breaker capabilities are not exceeded.

Once the Feasibility Study is completed, a Feasibility Study report will be prepared and transmitted to the Interconnection Customer along with a System Impact Study Agreement. In order to remain in the New Services Queue, the Interconnection Customer must return the executed System Impact Study Agreement within 30 days, along with documents demonstrating that an initial air permit application has been filed, if required, and the deposit contained in Section 204.3A of the Tariff. In some cases, where no network impacts are identified and there are no other projects in the vicinity of the small resource addition, the System Impact Study may not be required and the project will proceed directly to the Facilities Study.

#### 111.3 System Impact Study

As with the Feasibility Study, expedited analysis procedures will be utilized, where appropriate, in the course of the System Impact Study.

Load deliverability and generation deliverability tests are not performed for Energy Resources.

Stability analysis is generally not performed for small capacity additions. If the capacity of an existing generating resource is increased by 20 MW or less, stability will be evaluated for critical contingencies only if existing stability margins are small. New Generation Capacity Resources of 20 MW or less will only be evaluated if they are connected at a location where stability margins associated with existing resources are small.

Short circuit calculations are performed during the System Impact Study for small resource additions, taking into consideration all elements of the regional plan, to ensure that circuit breaker capabilities are not exceeded.

Once the System Impact Study is completed, a System Impact Study report will be prepared and transmitted to the Interconnection Customer along with a Facilities Study Agreement. In order to remain in the New Services Queue, the Interconnection Customer must return the executed Facilities Study Agreement within 30 days, along with a deposit in the amount of the estimated cost of the Facilities Study. The Interconnection Customer is responsible for all actual costs associated with the performance of the Facilities Study related to the request and will be billed for such costs following the completion of the Facilities Study. If no transmission system facilities are required, the Facilities Study may not be required and the project will proceed directly to the execution of an Interconnection Service Agreement.

### 111.4 Facilities Study

As with larger generation projects, transmission facilities design for any required Attachment Facilities, Local Upgrades and/or Network Upgrades will be performed through the execution of a Facilities Study Agreement between the Interconnection Customer and Transmission Provider. Transmission Provider may contract with consultants, including the Interconnected Transmission Owners, or contractors acting on their behalf, to perform the bulk of the activities required under the Facilities Study Agreement. In some cases, the Interconnection Customer and Transmission Provider may reach agreement allowing the Interconnection Customer to separately arrange for the design of some of the required transmission facilities. In such cases, facilities design will be reviewed, under the Facilities Study Agreement, by the Interconnected Transmission Owner.

Facilities design for small Energy Resource additions will be expedited to the extent possible. In most cases, few or no network upgrades will be required for small Energy Resource additions. Attachment facilities, for some small Energy Resource additions, may, in part, be elements of a "turn key" installation. In such instances, the design of "turn key" attachments will be reviewed by the Interconnected Transmission Owners or their contractors.

#### 111.5 Interconnection Service Agreement

As with larger generation projects, an Interconnection Service Agreement must be executed and filed with the FERC. For an Energy Resource, the Interconnection Service Agreement identifies the interconnection and the rights of the Interconnection Customer to participate in the energy market as well as the obligations, on the part of the Interconnection Customer, to pay for transmission facilities required to facilitate the interconnection.

In general, the execution of an Interconnection Service Agreement is no different for Energy Resource additions of 20 MW or less than for larger Energy Resources. However, in instances where an increase of 20 MW or less to an existing resource can be put in service immediately, a modified Interconnection Service Agreement may be executed. If such an increase is expedited through the System Impact Study phase, ahead of larger projects already in the New Services Queue, an Interconnection Service Agreement will be executed granting an interim interconnection. This interim interconnection will allow the Energy Resource increase to be implemented and the resource to participate in the energy market until studies have been completed for earlier queued resources and all related obligations have been defined. At such time, the interim rights awarded the smaller Energy Resource addition will become dependent on the construction of any required transmission facilities and the satisfaction of any financial obligations for those facilities. If, once those obligations are defined, the smaller Energy Resource addition desires to retain its interconnection, a new Interconnection Service Agreement will be executed.

If a new Energy Resource of 20 MW or less can be quickly connected to the system, an interim interconnection can be facilitated, as above, through the execution of a modified Interconnection Service Agreement.

## 111.6 Other Requirements

Requirements and application procedures related to PJM membership are specified in the PJM Manuals. Additionally, the PJM Manuals detail a range of operational requirements for generation owners related to, among other things, the need for control center facilities and modeling in the PJM Energy Management System and unit commitment tools.

# 112 Temporary Energy Resource Additions Of 20 MW Or Less But Greater Than 2 MW

This section describes procedures related to the submission and processing of requests related to the temporary interconnection of new generation resources of 20 MW or less but greater than 2 MW. These procedures apply to generation resources which can be quickly connected to the system in order to participate in the energy market and are connected with the expectation that they will be removed from the system within six months. Such resources may submit subsequent requests to modify or extend their interconnection status. The inherent assumptions justifying the greater degree of expedition in these procedures for temporary Energy Resources are (1) that such resources will typically only be interconnected to participate in the spot market to assist in meeting peak energy demand, and (2) that such resources will only be connected in situations where minimal or no transmission upgrades are required.

#### 112.1 Application

The Generation Interconnection Customer desiring the interconnection of a temporary Energy Resource of 20 MW or less but greater than 2 MW must submit a completed Attachment N – Form of Generation Interconnection Feasibility Study Agreement. Attachment N of the PJM Tariff may be found on the PJM web site at and must be submitted to Transmission Provider.

For temporary Energy Resources, all required analysis will be performed within the scope of the Feasibility Study referred to in the Attachment N application. These analyses will include all evaluations of transmission system impacts as well as any facilities design or review.

All requirements related to the submission, for a larger resource, of an Attachment N application must be satisfied for a temporary Energy Resource addition of 20 MW or less, including (i) an initial deposit in the amount of \$100 for each MW requested if the Generation Interconnection Request is received within the first calendar month of the current New Services Queue; an initial deposit in the amount of \$150 for each MW requested if the Generation Interconnection Request is received within the second calendar month of the current New Services Queue; or an initial deposit in the amount of \$200 for each MW requested, if the Generation Interconnection Request is received within the third calendar month of the current New Services Queue; and (ii) a base non-refundable deposit in the amount of \$1,000, if the Generation Interconnection Request is received within the first calendar month of the current New Services Queue; a base non-refundable deposit in the amount of \$2,000 if the Generation Interconnection Request is received within the second calendar month of the current New Services Queue; or a base non-refundable deposit of \$3,000, if the Generation Interconnection Request is received within the third calendar month of the current New Services Queue; and the third calendar month of the current New Services Queue; or a base non-refundable deposit of \$3,000, if the Generation Interconnection Request is received within the third calendar month of the current New Services Queue.

The base and initial per MW deposit received will be credited toward the Generation Interconnection Customer's cost responsibility for the Generation Interconnection Feasibility Study. Upon completion of the Feasibility Study, the Transmission Provider will return any unused refundable deposit monies to Interconnection Customer. Any remaining non-refundable deposit monies will be credited toward the Interconnection Customer's cost responsibility for any other studies conducted for that Interconnection Request under Part VI of the Tariff, which will be applied prior to the deposit monies collected for that other study. If any non-refundable deposit monies remain after all studies are complete, such monies will be returned to a Generation Interconnection Customer upon Initial Operation, or to a Transmission Interconnection Customer upon energization of completed facilities as provided in Attachment GG, Appendix III, Section 20 of the Tariff. The Interconnection Customer is responsible for all costs associated with the processing of the request and the performance of the Feasibility Study related to the request and will be billed for such costs following the completion of the Feasibility Study.

Documentation of site control must be submitted, for small resource additions, with the completed Attachment N. Site control may be demonstrated through an exclusive option to purchase the property on which the generation project is to be developed, a property deed, or a range of tax or corporate documents that identify property ownership. Site control must either be in the name of the party submitting the generation interconnection request or documentation

must be provided establishing the business relationship between the project developer and the party having site control.

All information required in the completed Attachment N related to the generating project site, point of interconnection, and generating unit size and configuration must be provided.

Because temporary Energy Resources are not granted any long term rights with respect to the transmission system, such requests will not be identified in the New Services Queue on the PJM web site. A separate queue of such requests will, however, be maintained in order to facilitate processing.

## 112.2 Feasibility/Impact/Facilities Study

Limited power flow analyses will be performed to ensure that local contingency criteria are not violated.

Load deliverability and generation deliverability tests are not performed for Energy Resources.

Stability analysis will only be performed if temporary Energy Resources are connected at a location where stability margins associated with existing resources are small.

Short circuit calculations are performed for small resource additions to ensure that circuit breaker capabilities are not exceeded.

It is expected that the attachment of temporary Energy Resources will be based on "turn key" installations. Transmission Provider may contract with consultants, including the Interconnected Transmission Owners, or contractors acting on their behalf, to evaluate the engineering details of the physical attachment as well as the relaying and metering associated with the resource.

## 112.3 Interconnection Service Agreement

A modified Interconnection Service Agreement will be executed and filed with the FERC, identifying the obligations and rights related to the interconnection of a temporary Energy Resource. Such agreement will identify the interconnection of the resource, cost responsibility for transmission system upgrades, if any, and the date when the temporary interconnection will expire.

## 112.4 Other Requirements

Membership and application fees will be waived for parties wishing to interconnect temporary Energy Resources, if they are not otherwise required based on a party's participation in PJM. Additionally, control center facilities and modeling requirements are also waived. However, temporary Energy Resources must have hourly integrated energy meters to facilitate payment for sales to the PJM spot market. Meter readings are also required to adjust hourly loads to accurately determine transmission and capacity obligations of load serving entities.

## 112A Screens Process for Permanent or Temporary Energy Resources of 2 MW or Less

This section describes procedures related to the submission and processing of requests related to the interconnection of permanent and temporary Energy Resources of 2 MW or less that meet the certification requirements of Attachments Z and AA of this Tariff. In the event that such an Energy Resource does not meet such certification requirements, the request for interconnection of the Energy Resource shall be processed under section 111 or 112, as applicable.

Energy Resources requesting interconnection under this Section 112A may be expedited ahead of larger projects already in the New Services Queue. In such instance, the Energy Resource shall be able to participate in the energy market until the studies have been completed for the earlier queued projects and all related obligations have been defined. At such time as these studies are completed and reveal additional obligations required of the Energy Resource interconnected under this Section 112A, a revised Interconnection Service Agreement shall be executed.

## 112A.1 Application

The Interconnection Customer desiring the interconnection of a new permanent or temporary Energy Resource of 2 MW or less under the procedures set forth in this section 112A must submit a completed Attachment Y -- Form of Screens Process Interconnection Request and provide the Transmission Provider (i) an initial deposit in the amount of \$100 for each megawatt requested if the Generation Interconnection Request is received within the first calendar month of the current New Services Queue; an initial deposit in the amount of \$150 for each megawatt requested if the Generation Interconnection Request is received within the second calendar month of the current New Services Queue; or an initial deposit in the amount of \$200 for each megawatt requested, if the Generation Interconnection Request is received within the third calendar month; all per megawatt amounts to be proportionately allocated to .1 (one-tenth) of a megawatt, and (ii) a base non-refundable processing fee in the amount of \$500, if the Generation Interconnection Request is received within the first calendar month of the current New Services Queue; a base non-refundable deposit in the amount of \$1,000 if the Generation Interconnection Request is received within the second calendar month of the current New Services Queue; or a base non-refundable deposit in the amount of \$1,500, if the Generation Interconnection Request is received within the third calendar month of the current New Services Queue. The base and initial per MW deposit received will be credited toward the Generation Interconnection Customer's cost responsibility for the Generation Interconnection Feasibility Study. Upon completion of the Feasibility Study, the Transmission Provider will return any unused refundable deposit monies to Interconnection Customer. Any remaining non-refundable deposit monies will be credited toward the Interconnection Customer's cost responsibility for any other studies conducted for that Interconnection Request under Part VI of the Tariff, which will be applied prior to the deposit monies collected for that other study. If any non-refundable deposit monies remain after all studies are complete, such monies will be returned to a Generation Interconnection Customer upon Initial Operation, or to a Transmission Interconnection Customer upon energization of completed facilities as provided in Attachment GG, Appendix III, Section 20 of the Tariff. Attachment Y of the PJM Tariff may be found on the PJM web site at . Within 15 business days after the Transmission Provider notifies the Interconnection Customer it has received a complete Screens Process Interconnection Request, the Transmission Provider in consultation with the Interconnected Transmission Owner(s) shall: (i) perform an initial review using the screens set forth below, (ii) notify the Interconnection Customer of the results of the initial review, and (iii) shall provide the Interconnection Customer with the analysis and data underlying the Transmission Provider's determinations under the screens The Interconnection Parties may mutually agree to a reasonable extension of time, for completion of the initial review, agreement not to be unreasonably withheld.

#### 112A.2 Screens

- 112A.2.1 The proposed interconnection must be on a portion of the Interconnected Transmission Owner's distribution facilities located in the PJM Region and the output of the Customer Facility to be used for wholesale sales in the PJM Region. Distribution facilities shall include facilities that are non-networked, often lower voltage facilities that carry power in one direction, but does not include sub transmission facilities.
- 112A.2.2 For interconnection of a proposed Energy Resource to a radial distribution circuit, the aggregated generation, including the proposed Energy Resource 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 an Interconnected Transmission Owner's electric system connected to a customer and bounded by automatic sectionalizing devices or the end of the distribution line.
- 112A.2.3 For interconnection of a proposed Energy Resource to the load side of spot network protectors, the proposed Energy Resource 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.
- 112A.2.4 The proposed Energy Resource, 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.
- 112A.2.5 The proposed Energy Resource, 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 proposed interconnection be accepted for a circuit that already exceeds 87.5 % of the short circuit interrupting capability.
- 112A.2.6 Using the table below, Transmission Provider, in consultation with the Interconnected Transmission Owner, shall 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 Interconnected Transmission Owner's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line	Type of Interconnection to	Result/Criteria
Туре	Primary Distribution Line	
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

- 112A.2.7 If the proposed Energy Resource is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Energy Resource, shall not exceed 20 kW.
- 112A.2.8 If the proposed Energy Resource 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.
- The proposed Energy Resource, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Energy Resource 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).
- 112A.2.10 No construction of facilities by the Interconnected Transmission Owner on its own system shall be required to accommodate the Energy Resource.

### 112A.3 Results of Screens

- 112A.3.1 If the proposed interconnection passes the screens set forth in section 112A.1 of this Tariff, the proposed interconnection shall be approved and the Transmission Provider will undertake Reasonable Efforts to provide the Interconnection Customer with an executable Interconnection Service Agreement within five business days after the determination. In the event that the Transmission Provider is unable to provide Interconnection Customer with an executable Interconnection Service Agreement within five business days, it shall provide Interconnection Customer with reasonable notification of the delay, including the reasons for the delay and the date it anticipates being able to provide the executable Interconnection Service Agreement. Interconnection Customer shall execute the Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement be filed unexecuted in accordance with section 212.4 of this Tariff.
- If the proposed interconnection of the Energy Resource fails the screens set forth in section 112A.1 of this Tariff, but the Transmission Provider, in consultation with the Interconnected Transmission Owner, determines that the Energy Resource may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the Transmission Provider will undertake Reasonable Efforts to provide the Interconnection Customer an executable Interconnection Service Agreement within five business days after such determination. In the event that the Transmission Provider is unable to provide Interconnection Customer with an executable Interconnection Service Agreement within five business days, it shall provide Interconnection Customer with reasonable notification of the delay, including the reasons for the delay and the date it anticipates being able to provide the executable Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement be filed unexecuted in accordance with section 212.4 of this Tariff.
- 112A.3.3 If the proposed interconnection of the Energy Resource fails the screens set forth in section 112A.1 of this Tariff, but the Transmission Provider does not or cannot determine from the initial review that the Energy Resource may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the Transmission Provider shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.

## 112A.4 Customer Options Meeting

- 112A.4.1 If the Transmission Provider determines that 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 Provider shall notify the Interconnection Customer and provide copies of all data and analyses underlying its conclusion. Within ten business days of the Transmission Provider's determination, the Transmission Provider shall offer to convene a customer options meeting with the Transmission Provider and the Transmission Owner to review possible Customer Facility modifications or the screens analysis and related results, to determine what further steps are needed to permit the Energy Resource to be connected safely and reliably. At the time of notification of the Transmission Provider's determination, or at the customer options meeting, the Transmission Provider and Transmission Owner, as applicable, shall:
- 112A.4.1.1 Offer to perform facility modifications or minor modifications to the Transmission 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 System; or
- 112A.4.1.2 Offer to perform a supplemental review if the Transmission Provider concludes that the supplemental review might determine that the Energy Resource could continue to qualify for interconnection pursuant to the screens process in section 112A of the Tariff, and provide a non-binding good faith estimate of the costs of such review; or
- 112A.4.1.3 Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under sections 111 or 112 of the Tariff, as applicable.

## 112A.5 Supplemental Review

- 112A.5.1 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 Provider's and 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 Provider will return such excess within 20 business days of the invoice without interest.
- 112A.5.2 Within ten business days following receipt of the deposit for a supplemental review, the Transmission Provider will determine if the Energy Resource can be interconnected safely and reliably.
- 112A.5.2.1 If so, the Transmission Provider will undertake Reasonable Efforts to provide the Interconnection Customer with an executable Interconnection Service Agreement within five business days after the determination. In the event that the Transmission Provider is unable to provide Interconnection Customer with an executable Interconnection Service Agreement within five business days, it shall provide Interconnection Customer with reasonable notification of the delay, including the reasons for the delay and the date it anticipates being able to provide the executable Interconnection Service Agreement. Interconnection Customer shall execute the Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement be filed unexecuted in accordance with section 212.4 of this Tariff.
- Resource to be interconnected consistent with safety, reliability, and power quality standards under screens process in section 112A of the Tariff, the Transmission Provider will undertake Reasonable Efforts to provide the Interconnection Customer with an executable Interconnection Service Agreement within five business days after confirmation that the Interconnection Customer has agreed to make the necessary changes at the Interconnection Customer's cost. In the event that the Transmission Provider is unable to provide Interconnection Customer with an executable Interconnection Service Agreement within the five business days, it shall provide Interconnection Customer with reasonable notification of the delay, including the reasons for the delay and the date it anticipates being able to provide the executable Interconnection Service Agreement. Interconnection Customer shall execute the Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement be filed unexecuted in accordance with section 212.4 of this Tariff.
- 112A.5.2.3 If so, and minor modifications to the Transmission System are required to allow the Energy Resource to be interconnected consistent with safety, reliability, and power quality standards under the screens process in section 112A of the Tariff, the Transmission Provider will undertake Reasonable Efforts to provide the Interconnection Customer with an executable Interconnection Service Agreement within ten business days that requires the Interconnection Customer to pay the costs of such system modifications prior to interconnection. In the event

that the Transmission Provider is unable to provide Interconnection Customer with an executable Interconnection Service Agreement within the ten business days, it shall provide Interconnection Customer with reasonable notification of the delay, including the reasons for the delay and the date it anticipates being able to provide the executable Interconnection Service Agreement. Interconnection Customer shall execute the Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement be filed unexecuted in accordance with section 212.4 of this Tariff.

112A.5.2.4 If not, the Interconnection Request will continue to be evaluated under section 111 or section 112 of the Tariff, as applicable.

# 112B Certified Inverter-Based Small Generating Facilities No Larger Than 10 kW

This section describes the procedures related to the submission and processing of requests related to the interconnection of Small Inverter Facilities.

## 112B.1 Application

An Interconnection Customer desiring the interconnection of a Small Inverter Facility must submit to Transmission Provider an executed Attachment BB - Form of Interconnection Service Agreement for Certified Inverter-Based Generating Facility ("Small Inverter ISA") and a non-refundable processing fee of \$100. Attachment BB is available on the PJM web site. In the Small Inverter ISA, Interconnection Customer shall provide, among other things, (i) contact information for itself and any other entity that may be interfacing with Transmission Provider on its behalf; and (ii) the legal names of the owner(s) of the Small Inverter Facility, including the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either. Transmission Provider shall acknowledge that it received the Small Inverter ISA within three business days of receipt. Within ten business days, Transmission Provider shall notify Interconnection Customer that the Small Inverter ISA is complete or identify any deficiencies that need to be addressed.

### 112B.2 Verification of Interconnection

Within 15 business days of notification to the Interconnection Customer that its Small Inverter ISA is complete, Transmission Provider shall notify Interconnection Customer whether its Small Inverter Facility can be interconnected safely and reliably. Transmission Provider shall make this determination using the screens set forth in section 112A of this Tariff. In the event that the Transmission Provider determines that the Small Inverter Facility can be safely and reliably interconnected, Transmission Provider shall tender the Small Inverter ISA to the Interconnected Transmission Owner for execution. The Interconnected Transmission Owner shall have five business days to execute the Small Inverter ISA and return it to Transmission Provider. Transmission Provider then will provide the Interconnected Parties with the Small Inverter ISA. In the event an Interconnection Party does not execute the Small Inverter ISA, the Interconnection Customer may request the agreement be filed unexecuted with the FERC or alternative dispute resolution in accordance with section 212.4 of this Tariff.

## 112B.3 Certificate of Completion and Inspection

112B.3.1 Upon receipt of an executed Small Inverter ISA, the Interconnection Customer may commence construction (including operational testing not to exceed two hours) of its Small Inverter Facility. After completion of the Small Inverter Facility, Interconnection Customer shall provide Transmission Provider with a completed Attachment CC - Form of Certificate of Completion.

112B,3,2 Prior to parallel operation, Transmission Provider and/or Interconnected Transmission Owner may inspect the Small Inverter Facility for compliance with standards, which may include a witness test. All inspections by Transmission Provider and/or the Interconnected Transmission Owner shall be at its own expense, within ten business days after receipt of the completed Certificate of Completion and shall take place at a time agreeable to the Transmission Provider and/or Interconnected Transmission Owner and the Interconnection Customer, Unless otherwise agreed by the Transmission Provider and/or the Interconnected Transmission Owner and the Interconnection Customer, if the Transmission Provider and/or the Interconnected Transmission Owner do not schedule an inspection of the Small Inverter Facility within ten business days after receipt of the completed Certificate of Completion, the right to inspection, including the witness test, is waived. Transmission Provider and/or the Interconnected Transmission Owner shall provide a written statement that the Small Inverter Facility has passed inspection or shall notify the Interconnection Customer of what steps are necessary to pass inspection as soon as practicable after the inspection takes place.

# 112B.4Interconnection and Operation

- 112B.4.1 The Interconnection Customer may interconnect and operate the Small Inverter Facility after all of the following have occurred:
- (a) Upon completing construction, the Interconnection Customer has caused the Small Inverter Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- (b) The Interconnection Customer provides Transmission Provider with a completed Certificate of Completion, and
- (c) In accordance with section 112B.3(b) of this Tariff, the Transmission Provider and/or Interconnected Transmission Owner has either completed its inspection of the Small Inverter Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes or has waived such inspection.
- 112B.4.2 Transmission Provider and/or the Interconnected Transmission Owner shall have the right to disconnect the Small Inverter Facility in the event of improper installation of the Small Inverter Facility, an unsatisfactory witness test, or failure to return a completed Certificate of Completion.
- 112B.4.3 Revenue quality metering equipment must be installed at the Small Inverter Facility and tested in accordance with applicable ANSI standards. Prior to parallel operation of the Small Inverter Facility, Transmission Provider and/or Interconnected Transmission Owner may schedule appropriate metering replacement, if necessary.

# 112B.5Safe Operations and Maintenance

The Interconnection Customer shall be fully responsible to operate, maintain, and repair the Small Inverter Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

### 112B.6Access

Transmission Provider and/or the Interconnected Transmission Owner shall have ready access to the disconnecting means and metering equipment of the Small Inverter Facility at all times. Transmission Provider and/or Interconnected Transmission Owner shall provide reasonable notice to the Interconnection Customer when possible prior to using its right of access.

### 112B.7 Disconnection

- 112B.7.1 The Transmission Provider and/or the Interconnected Transmission Owner may temporarily disconnect a Small Inverter Facility upon the following conditions:
- (a) For scheduled outages upon reasonable notice.
- (b) For unscheduled outages or emergency conditions.
- (c) If the Small Inverter Facility does not operate in the manner consistent with the terms and conditions of section 112B of this Tariff or applicable PJM Manuals.
- 112B.7.2 Transmission Provider shall inform the Interconnection Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

## 112B.8 Indemnification

The Transmission Provider, Interconnected Transmission Owner, and the Interconnection Customer 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 relating to its obligations under this section 112B of this Tariff on behalf of the indemnifying party, except in cases of gross negligence or intentional wrongdoing by the indemnified party.

#### 112B.9 Insurance

An Interconnection Customer interconnecting a Small Inverter Facility shall maintain commercially reasonable amounts of general liability insurance and additionally shall follow all applicable insurance requirements imposed by the state in which the Point of Interconnection is located. All insurance policies must be maintained with insurers authorized to do business in that state. The amount and type of insurance to be evidenced by an insurance certificate. All other insurance requirements in section 13 of Appendix 2 of Attachment O of this Tariff and 11 of Appendix 2 of Attachment P of this Tariff are applicable to certified inverter-based small generating facilities no larger than 10 kilowatts.

# 112B.10 Limitation of Liability

Transmission Provider's, Interconnected Transmission Owner's, and Interconnection Customer'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 its obligations under section 112B of this Tariff 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 section 112B.8 of this Tariff.

### 112B.11 Termination

A Small Inverter Facility ISA and parallel operation pursuant to this section 112B may be terminated under the following conditions:

- (a) By the Interconnection Customer. By providing written notice to the Transmission Provider and the Interconnected Transmission Owner.
- (b) By the Transmission Provider. If the Small Inverter Facility fails to operate for any consecutive 12 month period or the Interconnection Customer fails to remedy a violation of the terms of this section 112B or the Small Inverter ISA.
- (c) Permanent Disconnection. In the event that a Small Inverter ISA or parallel operation under this section 112B is terminated, the Transmission Provider and/or Interconnected Transmission Owner shall have the right to disconnect its facilities or direct the Interconnection Customer to disconnect its Small Inverter Facility.
- (d) Survival Rights. The Small Inverter ISA shall continue in effect after termination of parallel operation of the Small Inverter Facility or the Small Inverter ISA to the extent necessary to allow or require the party[ies] to fulfill rights or obligations that arose under this section 112B and the Small Inverter ISA.

# 112B.12 Assignment/Transfer of Ownership of the Small Inverter Facility

A Small Inverter Facility ISA shall survive the transfer of ownership of the Small Inverter Facility to a new owner when the new owner agrees in writing to comply with the terms of the Small Inverter Facility ISA and so notifies the Transmission Provider and Interconnected Transmission Owner.

# V. GENERATION DEACTIVATION

References to section numbers in this Part V refer to sections of this Part V, unless otherwise specified.

## Preamble:

Deactivation of generating units in the PJM Region shall be governed by this Part V of this Tariff.

### 113 Notices

### 113.1 Generation Owner Notice:

When a Generation Owner desires to deactivate a generating unit located in the PJM Region, such Generation Owner, or its Designated Agent, must provide notice of such proposed Deactivation in writing to the Transmission Provider no later than 90 days prior to the proposed Deactivation Date for the generating unit. This notice shall include an indication of whether the generating unit is being retired or mothballed, the desired Deactivation Date, and a good faith estimate of the amount of any project investment and the time period the generating unit would be out of service for repairs, if any, that would be required to keep the unit in, or return the unit to, operation. PJM shall promptly provide a copy of such notice to the Market Monitoring Unit.

## 113.2 Notice of Reliability Impact:

Within 30 days of the receipt of the Generation Owner's notice pursuant to section 113.1 of this Tariff, the Transmission Provider shall inform Generation Owner, or its Designated Agent, whether the Deactivation of the generating unit would adversely affect the reliability of the Transmission System. In the event there are no reliability issues associated with the proposed Deactivation of the generating unit, Transmission Provider shall so notify Generation Owner, or its Designated Agent, and the Generation Owner or its Designated Agent may deactivate its generating unit at any time thereafter. The Generation Owner shall coordinate with the appropriate Transmission Owner and the Transmission Provider regarding the removal of any transmission equipment located at the generating unit proposed for Deactivation. In the event the Transmission Provider determines that, in accordance with established reliability criteria, the Deactivation of Generation Owner's generating unit would adversely affect the reliability of the Transmission System absent upgrades to the Transmission System, it shall notify the Generation Owner, or its Designated Agent, of the reliability concerns. Such notice shall (1) identify the specific reliability impact resulting from the proposed Deactivation of the generating unit; and (2) provide an initial estimate of the period of time it will take to complete the Transmission System reliability upgrades necessary to alleviate the reliability impact. Regardless of whether the Deactivation of the generating unit would adversely affect the reliability of the Transmission System, the Generation Owner or its Designated Agent may deactivate its generating unit, subject to the notice requirements in section 113.1 of this Tariff. Within 60 days of Generation Owner's or its Designated Agent's notice pursuant to section 113.1 of this Tariff, the Generation Owner or its Designated Agent shall inform Transmission Provider whether the generating unit proposed for Deactivation will continue operating beyond its desired Deactivation Date during the period of construction of the Transmission System reliability upgrades necessary to alleviate the reliability impact resulting from the Deactivation of the generating unit, and if the generating unit will continue operating, provide the Transmission Provider with an updated estimate of the amount of any project investment and the time period the generating unit would be out of service for repairs, if any, that would be required to keep the unit in, or return the unit to, operation. For generating units that will continue operating beyond their desired Deactivation Dates, Transmission Provider shall (a) within 75 days of Generation Owner's or its Designated Agent's notice pursuant to section 113.1 of this Tariff, provide an updated estimate of the period of time it will take to complete the Transmission System upgrades necessary to alleviate the reliability

impact; and (b) within 90 days of Generation Owner's or its Designated Agent's notice pursuant to section 113.1 of this Tariff, post on its internet site full details of the transmission upgrades necessary to alleviate the reliability impact that would result from the Deactivation of the generating unit. Upon receipt of notification from the Transmission Provider that Deactivation of the generating unit would cause reliability concerns, the Generation Owner shall immediately be entitled to file with the Commission a cost of service rate to recover the entire cost of operating the generating unit until such time as the generating unit is deactivated pursuant to this Part V ("Cost of Service Recovery Rate"). In the alternative, the Generation Owner may elect to receive the Deactivation Avoidable Cost Credit provided under this Part V.

## 113.3 Subsequent Deactivation Notice for Generating Units Continuing to Operate:

In the event that a Generation Owner or its Designated Agent, which has informed Transmission Provider pursuant to section 113.2 that a generating unit will continue operating, desires to deactivate such generating unit prior to the completion date of the Transmission System reliability upgrades necessary to alleviate the reliability impact resulting from the Deactivation of the generating unit, or the date that the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System, the Generation Owner or its Designated Agent shall provide notice of such proposed Deactivation in writing to the Transmission Provider no later than 90 days prior to the desired Deactivation Date for the generating unit.

### 114 Deactivation Avoidable Cost Credit:

In the event that the Generation Owner or its Designated Agent informs Transmission Provider pursuant to section 113.2 that it will continue operating a generating unit beyond its desired Deactivation Date, the Generation Owner or its Designated Agent shall receive a monthly Deactivation Avoidable Cost Credit for such continued operation pursuant to the terms and conditions of this section 114.

Subject to section 119 of this Tariff, a Generation Owner or its Designated Agent shall be eligible for Deactivation Avoidable Cost Credits commencing on the later of the proposed Deactivation Date of its generating unit or the day after the Generation Owner or its Designated Agent submits the informational filing pursuant to section 116 of this Tariff and continuing until the earlier of such time as the generating unit is deactivated or the completion date of the necessary

Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System. The Transmission Provider shall give at least thirty days notice to a Generation Owner or its Designated Agent of the date when continued operation of a generating unit is no longer required under Part V of the Tariff.

Deactivation Avoidable Cost Credits shall be determined according to the following formula:

Deactivation Avoidable Cost Credit = ((Deactivation Avoidable Cost Rate + Applicable Adder) \* MW capability of the unit \* Number of days in the month) – Actual Net Revenues

### Where:

**Deactivation Avoidable Cost Rate** is the Generation Owner's Deactivation Avoidable Cost Rate determined pursuant to section 115 of this Tariff.

Applicable Adder is the appropriate adder specified below:

First Year Adder: 10 percent of the Generation Owner's Deactivation Avoidable Cost Rate. This adder shall apply commencing on the desired Deactivation Date of the generating unit proposed for Deactivation and for the 12 months thereafter.

Second Year Adder: 20 percent of the Generation Owner's Deactivation Avoidable Cost Rate. This adder shall apply commencing on the first day of the 13<sup>th</sup> month after the desired Deactivation Date of the generating unit proposed for Deactivation and for the 12 months thereafter.

Third Year Adder: 35 percent of the Generation Owner's Deactivation Avoidable Cost Rate. This adder shall apply commencing on the first day of the 25<sup>th</sup> month after the desired Deactivation Date of the generating unit proposed for Deactivation and for the 12 months thereafter.

Fourth Year Adder: 50 percent of the Generation Owner's Deactivation Avoidable Cost Rate. This adder shall apply commencing on the first day of the 37<sup>th</sup> month after the desired Deactivation Date of the generating unit proposed for Deactivation and until the earlier of such time as the generating unit is deactivated or the completion date of the necessary Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System.

If the Generation Owner, or its Designated Agent, provides the Transmission Provider with notice pursuant to section 113.1 of this Tariff 180 days prior to the proposed Deactivation Date of the generating unit, the First Year Adder will be increased to 14 percent of the Generation Owner's Deactivation Avoidable Cost Rate. For each additional 30 days notice greater than 180 days, the First Year Adder will increase by 1 percent of the Generation Owner's Deactivation Avoidable Cost Rate, up to a maximum of 20 percent for 12 months notice or greater.

(Deactivation Avoidable Cost Rate + Applicable Adder) is expressed in \$/MW day.

Actual Net Revenues are all revenues from PJM markets and unit-specific bilateral contracts net of marginal cost of service recoverable under cost-based offers to sell energy from operating capacity on the PJM Interchange Energy Market under the Operating Agreement, not less than zero.

Deactivation Avoidable Cost Credit shall not be less than zero. If at any time, the Deactivation Avoidable Cost Rate + Applicable Adder, expressed in \$/MW day, exceeds the Daily Capacity Deficiency Rate, the Generation Owner shall be credited the Daily Capacity Deficiency Rate multiplied by the generating unit's MW capability, less any Actual Net Revenues.

The Market Monitoring Unit and the generating unit owner shall attempt to come to agreement on the appropriate level of each component included in the Deactivation Avoidable Cost Credit. If a generating unit owner includes a cost component inconsistent with its agreement or inconsistent with the Market Monitoring Unit's determination regarding such cost components, the Market Monitoring Unit may petition the Commission for an order that would require the generating unit owner to include an appropriate cost component. This provision is duplicated in section IV.2 of Attachment M – Appendix.

#### 115 Deactivation Avoidable Cost Rate:

The Deactivation Avoidable Cost Rate for a generating unit proposed for Deactivation shall be determined using the following formula:

Deactivation Avoidable Cost Rate = ((AOML + AAE + AME + AVE + ATFI + ACC + ACLE) / 12) +APIR

Where:

- AOML (Avoidable Operations and Maintenance Labor) consists of the avoidable labor expenses related directly to operations and maintenance of the generating unit proposed for Deactivation for the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. The categories of expenses included in AOML are those incurred for: (a) on-site based labor engaged in operations and maintenance activities; (b) off-site based labor engaged in on-site operations and maintenance activities directly related to the generating unit; and (c) off-site based labor engaged in off-site operations and maintenance activities directly related to generating unit equipment removed from the generating unit site.
- AAE (Avoidable Administrative Expenses) consists of the avoidable administrative expenses related directly to employees at the generating unit proposed for Deactivation for twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. The categories of expenses included in AAE are those incurred for: (a) employee expenses (except employee expenses included in AOML); (b) environmental fees; (c) safety and operator training; (d) office supplies; (e) communications; and (f) annual plant test, inspection and analysis.
- AME (Avoidable Maintenance Expenses) consists of avoidable maintenance expenses (other than expenses included in AOML) related directly to the generating unit proposed for Deactivation for the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. The categories of expenses included in AME are those incurred for: (a) chemical and materials consumed during maintenance of the generating unit; and (b) rented maintenance equipment used to maintain the generating unit.
- AVE (Avoidable Variable Expenses) consists of avoidable variable expenses related directly to the generating unit proposed for Deactivation incurred in the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. The categories of expenses included in AVE are those incurred for: (a) water treatment chemicals and lubricants; (b) water, gas, and electric service (not for power generation); and (c) waste water treatment.

- ATFI (Avoidable Taxes, Fees and Insurance) consists of avoidable expenses related directly to the generating unit proposed for Deactivation incurred in the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. The categories of expenses included in AFTI are those incurred for: (a) insurance; (b) permits and licensing fees; (c) site security and utilities for maintaining security at the site; and (d) property taxes.
- ACC (Avoidable Carrying Charges) consists of avoidable short term carrying charges related directly to the generating unit proposed for Deactivation in the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. Avoidable short term carrying charges shall include short term carrying charges for maintaining reasonable levels of inventories of fuel and spare parts that result from short-term operational unit decisions as measured by industry best practice standards. For the purpose of determining ACC, short term is the time period in which a reasonable replacement of inventory for normal, expected operations can occur.
- ACLE (Avoidable Corporate Level Expenses) consists of avoidable corporate level expenses directly related to the generating unit proposed for Deactivation incurred in the twelve months preceding the Generation Owner's notice pursuant to section 113.1 of this Tariff. Avoidable corporate level expenses shall include only such expenses that are directly linked to providing tangible services required for the operation of the generating unit proposed for Deactivation. The categories of avoidable expenses included in ACLE are those incurred for: (a) legal services; (b) environmental reporting; and (c) procurement expenses.
- APIR (Avoidable Project Investment Recovery Rate) = PI/NMR

Where:

PI is the amount of project investment required to enable a generating unit proposed for Deactivation to continue operating beyond its proposed Deactivation Date.

NMR is the number of months beyond the proposed Deactivation Date of a generating unit proposed for Deactivation that the Transmission Provider has specified in its updated estimate pursuant to section 113.2 of this Tariff that such generating unit shall be required to operate.

PI recovered through the APIR, shall not commence before the in-service date of the PI. The amount recovered through the APIR shall not exceed the actual amount of the PI, and in no event shall recovery through the APIR exceed \$2 million.

For the purpose of determining Deactivation Avoidable Cost Rate, avoidable expenses are incremental expenses directly required for the operation of a generating unit proposed for

Deactivation that a Generation Owner would not incur if such generating unit deactivated on its proposed Deactivation Date rather than continuing to operate beyond its proposed Deactivation Date. A generating unit owner shall direct all inquiries regarding avoidable expenses to the Market Monitoring Unit.

For the purpose of determining a Deactivation Avoidable Cost Rate, avoidable expenses shall exclude variable costs recoverable under cost-based offers to sell energy from operating capacity on the PJM Interchange Energy Market under the Operating Agreement.

## 116 Filing and Updating of Deactivation Avoidable Cost Rate:

As of the proposed Deactivation Date of a generating unit or as of the day prior to the effective date of an updated Deactivation Avoidable Cost Rate, the Generation Owner or its Designated Agent shall file with the Commission, for informational purposes, the Deactivation Avoidable Cost Rate, along with applicable cost support and a certification by an officer of the Generation Owner or its Designated Agent attesting to the accuracy of the Deactivation Avoidable Cost Rate. Generation Owner or its Designated Agent may update the Deactivation Avoidable Cost Rate annually, as well as, following materially adverse unforeseen circumstances affecting the unit that increase the costs incurred by the Generation Owner. Generation Owner, or its Designated Agent, shall provide Transmission Provider with a copy of informational filings submitted pursuant to this section 116. Crediting of the Deactivation Avoidable Cost Credit to the Generation Owner or its Designated Agent by the Transmission Provider shall commence on the later of the day following the date of this informational filing or the proposed Deactivation Date of the Generation Owner's generating unit.

# 117 Excess Project Investment Required:

In the event that a Generation Owner has informed Transmission Provider pursuant to section 113.2 that a generating unit will continue operating beyond its desired Deactivation Date, but such generating unit cannot continue to operate without PI, as defined in the APIR set forth in section 115 of this Tariff, that exceeds the limit for recovery of PI specified in the APIR, the Generation Owner, or its Designated Agent, may file a rate with the Commission to recover the PI in excess of the permissible limit for recovery of PI through the APIR. Prior to PI in excess of the recovery limit set forth in the APIR being made, the need for such PI shall be verified by an independent third party retained by the Generation Owner, or its Designated Agent, and provided to the Transmission Provider. Transmission Provider shall credit Generation Owner the amount of such rate commencing on the effective date established by the Commission for the rate.

## 118 Refund of Project Investment Reimbursement:

In the event that the Generation Owner's PI in the generating unit proposed for Deactivation and credited either under section 117 of this Tariff or through the APIR set forth in section 115 of this Tariff enables the generating unit to remain operational beyond the completion date of the necessary Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the date that the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System, and the generating unit remains in service beyond such date, the Generation Owner or its Designated Agent shall refund Transmission Provider a pro-rata share of the amount of any PI for which it received reimbursement pursuant to section 117 and/or the APIR set forth in section 115 of this Tariff. The Refund of Project Investment Reimbursement shall be determined using the following formula:

Refund of Project Investment Reimbursement = ((Number of months the PI permits the generating unit proposed for Deactivation to operate – The number of months Transmission Provider determines is required to construct the Transmission System reliability upgrades necessary to alleviate the reliability impact resulting from the Deactivation of the generating unit) / (Number of months the PI permits the generating unit proposed for Deactivation to operate)) \* (The amount of the PI/ (Number of months the PI allows the generating unit proposed for Deactivation to continue to operate past the completion date of the necessary Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the date that the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System)).

#### Where:

The number of months the PI permits the generating unit proposed for Deactivation to operate is determined by the Generation Owner or its Designated Agent and verified by an independent entity.

Generation Owner or its Designated Agent shall make the Refund of Project Investment Reimbursement each month for the number of months the PI allows the generating unit proposed for Deactivation to continue to operate past the completion date of the necessary Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the date that the Transmission Provider otherwise determines, in accordance with established reliability criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System and shall be credited to transmission customers in such month on the same basis as costs are allocated under section 120. The months the generating unit proposed for Deactivation continues to operate past the completion date of the necessary Transmission System reliability upgrades that would alleviate the reliability impact resulting from the Deactivation of the generating unit, or the date that the Transmission Provider otherwise determines, in accordance with established reliability

criteria, that the continued operation of the generating unit is no longer necessary for the reliability of the Transmission System need not be continuous, and the Refund of Project Investment Reimbursement will continue regardless of ownership of the generating unit.

## 118A Recovery of Project Investment:

A Generation Owner or its Designated Agent shall be entitled to continue to recover its PI costs under section 115 and/or section 117 of this Tariff in situations where the Transmission Provider subsequently determines the generation unit is no longer needed for reliability of the Transmission System and the generating unit is deactivated prior to recovering its PI costs; provided however, that any PI cost recovery pursuant to this section shall be net of any PI reimbursements already credited to the Generation Owner to its Designated Agent pursuant to section 117 and/or the APIR set forth in section 115 of this Tariff.

## 119 Cost of Service Recovery Rate:

Notwithstanding anything to the contrary in Part V of this Tariff, a Generation Owner with a generating unit proposed for Deactivation that continues operating beyond its proposed Deactivation Date may file with the Commission a cost of service rate to recover the entire cost of operating the generating unit until such time as the generating unit is deactivated pursuant to this Part V ("Cost of Service Recovery Rate"). In the event that the Generation Owner or its Designated Agent files a rate pursuant to this section 119, the Generation Owner shall not be eligible to receive Deactivation Avoidable Cost Credits or any compensation pursuant to section 117 of this Tariff, except as provided pursuant to this section 119, and PJMSettlement shall pay the Generation Owner the Cost of Service Recovery Rate accepted by the Commission commencing on the effective date established by the Commission for the rate. In the event the Generation Owner or its Designated Agent already is receiving Deactivation Avoidable Cost Credits, prior to filing an Cost of Service Recovery Rate, such Deactivation Avoidable Cost Credits will cease as of the date that the Generation Owner or its Designated Agent files its Cost of Service Recovery Rate, and PJMSettlement shall begin paying the Generation Owner or its Designated Agent the Cost of Service Recovery Rate accepted by the Commission commencing on the effective date established by the Commission for the rate. In the event the Generation Owner or its Designated Agent already is receiving compensation pursuant to section 117 of this Tariff, prior to filing an Cost of Service Recovery Rate, such compensation shall continue until the effective date established by the Commission for the Cost of Service Recovery Rate.

A generating resource owner shall direct all inquiries regarding avoidable expenses to the Market Monitoring Unit. If a generating resource owner includes a cost component inconsistent with its agreement or inconsistent with the Market Monitoring Unit's determination regarding such cost components, the Market Monitoring Unit may petition the Commission for an order that would require the generating resource owner to include an appropriate cost component. This provision is duplicated in section IV.2 of Attachment M – Appendix.

Effective Date: 1/1/2011 - Docket #: ER11-2527-000

#### 120 Cost Allocation:

The costs incurred to compensate Generation Owners pursuant to this Part V of this Tariff shall be an additional transmission charge allocated to the load in the Zone(s) of the Transmission Owner(s) that will be assigned financial responsibility for the reliability upgrades necessary to alleviate the reliability impact that would result from the Deactivation of the generating unit and this new charge shall be collected monthly from such loads in addition to all other charges for transmission service to such loads.

#### 121 Performance Standards:

A generating unit proposed for Deactivation that continues to operate for reliability beyond its desired Deactivation Date pursuant to Part V of the Tariff shall continue to be operated according to existing standards applicable to generating units located in the PJM Region.

#### 122 Black Start Units:

Nothing in this Part V of the Tariff relieves owners of Black Start Units of any obligations or requirements set forth in Schedule 6A of the Tariff, including (a) the two year rolling commitment to provide Black Start Service; (b) the notice requirements for terminating such commitment; or (c) the forfeiture of Black Start Service revenues for failure to fulfill such commitment.

# 123-199 [Reserved]

# VI. ADMINISTRATION AND STUDY OF NEW SERVICE REQUESTS; RIGHTS ASSOCIATED WITH CUSTOMER-FUNDED UPGRADES

References to section numbers in this Part VI refer to sections of this Part VI, unless otherwise specified.

#### Preamble

Part VI of the Tariff sets forth the procedures and other terms governing the Transmission Provider's administration of the New Services Queue; procedures and other terms regarding studies and other processing of New Service Requests; the nature and timing of the agreements required in connection with studies and construction of required facilities; and terms and conditions relating to the rights available to New Service Customers in consideration of their payments for Customer-Funded Upgrades.

## 200 Applicability:

Part VI of the Tariff applies (a) to an Interconnection Request, upon the Transmission Provider's determination in an Interconnection Feasibility Study that a System Impact Study is needed to evaluate the facilities required to accommodate the requested interconnection; (b) to a Completed Application for new transmission service, upon the Transmission Provider's determination in an Initial Study that a System Impact Study is needed to evaluate the facilities required to provide the requested service; and (c) to Upgrade Requests, upon the Transmission Provider's receipt of a completed request containing all applicable information in the form required by Attachment EE to the Tariff. Notwithstanding the foregoing sentence, however, the provisions of Subpart G of Part IV shall govern with respect to Generation Interconnection Requests that involve (i) proposed new generation resources having capability of 20 MW or less, or (ii) increases of 20 MW or less to the capability of existing generation resources, except where, and only to the extent, otherwise expressly provided herein.

#### 201 Queue Position:

Each New Service Request shall be assigned a priority, or Queue Position, based on the date and time it is received, i.e., Queue Positions will be assigned on a first-come, first-served basis. The Queue Position of each Interconnection Request and each Completed Application shall be assigned in accordance with the applicable terms of Part II, Part III, or Part IV. The Queue Position of each Upgrade Request shall be the date of Transmission Provider's receipt of all applicable information required by Attachment EE of the Tariff. Subject to the applicable terms of the Tariff, all New Service Requests shall be processed as part of a single New Services Queue. The Transmission Provider shall publish the New Services Queue on its OASIS identifying each pending New Servce Request and its status as and to the the extent consistent with applicable terms of the Tariff. For the purpose of determining the amount of a New Service Customer's cost responsibility for the construction of necessary facilities or upgrades to accommodate its New Service Request, a New Service Request that is deemed terminated and withdrawn under this Part VI or other applicable terms of the Tariff shall concurrently lose its Oueue Position and will not be included in any further studies. Nothing in this Section 201, however, precludes an entity from later submitting another New Service Request or resubmitting a withdrawn or terminated New Service Request and receiving a new Queue Position.

#### 201.1 Transferability of Queue Position:

A New Service Customer may transfer its Queue Position to another entity only if, (a) in the case of a transfer by an Interconnection Customer, the other entity acquires the rights to the same Point(s) of Interconnection identified in the Interconnection Request, or, (b) in the case of a transfer by any other New Service Customer, the acquiring entity accepts, as applicable, the same receipt and delivery points or the same source and sink as stated in the transferor's New Service Request.

# Subpart A – System Impact Studies and Facilities Studies for New Service Requests

#### 202 Coordination with Affected Systems:

The Transmission Provider will coordinate with Affected System Operators the conduct of any studies required to determine the impact of a New Service Request on any Affected System and, if possible, will include those results in its New Service Studies within the time frames specified in this Part VI. The Transmission Provider will invite such Affected System Operators to participate in all meetings held with the Interconnection Customer as required by Part VI. The Interconnection Customer will cooperate with the Transmission Provider in all matters related to the conduct of studies by Affected System Operators and the determination of modifications to Affected Systems needed to accommodate the Interconnection Request. Transmission Provider shall contact any potential Affected System and shall provide information regarding each relevant New Service Request as required for the Affected System Operator's studies of the effects of such request. A provider of transmission services on a system that may be an Affected System shall cooperate with the Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems related to New Service Requests under the Tariff.

## 203 System Impact Study Agreement:

Transmission Provider shall conduct System Impact Studies pursuant to a System Impact Study Agreement with each affected New Service Customer. The form of the System Impact Study Agreement is included in Attachment N-1 of the Tariff. Pursuant to the System Impact Study Agreement, the New Service Customer shall agree to reimburse the Transmission Provider for the cost of a System Impact Study.

#### 203.1 Cost Responsibility:

The System Impact Study Agreement tendered by the Transmission Provider will clearly specify the Transmission Provider's estimate (determined in coordination with the affected Transmission Owner(s)) of the cost and time required for completion of the study in which the New Service Request is being evaluated and the New Service Customer's cost responsibility for that study. The charges to all affected New Service Customers shall not exceed the actual cost of the System Impact Study. In performing the System Impact Study, the Transmission Provider shall rely, to the extent reasonably practicable, on existing transmission planning studies. New Service Customers will not be assessed a charge for such existing studies; however, a New Service Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of such customer's New Service Request. In the event more than one New Service Request is evaluated in a single System Impact Study, the cost of such study shall be allocated among the participating New Service Customers such that (i) each Interconnection Customer pays 100 percent of the study costs associated with evaluating the Attachment Facilities necessary to accommodate its Interconnection Request; (ii) each Eligible Customer pays 100 percent of the study costs associated with evaluating the Direct Assignment Facilities necessary to accommodate its Completed Application for new transmission service; and (iii) each New Service Customer pays the study costs associated with evaluating the Local Upgrades and/or Network Upgrades necessary to accommodate its New Service Request in proportion to its projected cost responsibility (as determined in the Interconnection Feasibility Study or the Initial Study) for such upgrades. In the event that a New Service Customer's responsibility for the actual cost of the System Impact Study under this section is less than the deposit provided with its executed System Impact Study Agreement, the unexpended balance of its deposit shall be refunded, with interest determined at the applicable rate under the Commission's regulations.

#### 203.1.1 Transmission Owners:

For System Impact Studies that the Transmission Provider conducts on behalf of a Transmission Owner, the Transmission Owner shall record the cost of the System Impact Studies pursuant to Section 8.

# 204 Tender of System Impact Study Agreement:

## 204.1 Completed Applications:

After completing an Initial Study regarding a Completed Application for new transmission service, the Transmission Provider shall determine on a non-discriminatory basis whether a System Impact Study is required to accommodate the requested transmission service. If the Transmission Provider determines that a System Impact Study is necessary to accommodate the requested service, it shall so inform the Eligible Customer as soon as practicable. In such cases, the Transmission Provider shall, upon completion of the Initial Study, tender a System Impact Study Agreement pursuant to which the Eligible Customer shall agree to reimburse the Transmission Provider for the required System Impact Study. For a Completed Application to retain its Queue Position, the Eligible Customer (i) shall execute the System Impact Study Agreement and return it to the Transmission Provider within thirty (30) days, and (ii) shall pay the Transmission Provider a \$50,000 deposit which will be applied to the Interconnection Customer's study cost responsibility. If the Eligible Customer elects not to execute the System Impact Study Agreement, its Completed Application shall be deemed terminated and withdrawn, and its deposit provided pursuant to Section 17.3 shall be returned, with interest.

#### 204.2 Upgrade Requests:

After receiving an Upgrade Request pursuant to section 7.8 of Schedule 1 of the Operating Agreement, the Transmission Provider shall determine on a non-discriminatory basis whether a System Impact Study is required to evaluate the request. If the Transmission Provider determines that a System Impact Study is necessary, it shall so inform the Upgrade Customer as soon as practicable. In such cases, the Transmission Provider shall, within thirty (30) days of receipt of a valid and complete Upgrade Request, tender a System Impact Study Agreement pursuant to which the Upgrade Customer shall agree to reimburse the Transmission Provider for the required System Impact Study. For an Upgrade Request to retain its Queue Position, the Upgrade Customer (i) shall execute the System Impact Study Agreement and return it to the Transmission Provider within thirty (30) days, and (ii) shall pay the Transmission Provider a \$50,000 deposit which will be applied to the Interconnection Customer's study cost responsibility. If the Upgrade Customer elects not to execute the System Impact Study Agreement, its Upgrade Request shall be deemed terminated and withdrawn.

#### 204.3 Interconnection Requests:

Upon completion of the Interconnection Feasibility Study, the Transmission Provider shall tender to the affected Interconnection Customer a System Impact Study Agreement. For an Interconnection Request to retain its assigned Queue Position pursuant to Section 201, within 30 days of receiving the tendered System Impact Study Agreement, the Interconnection Customer (i) shall execute the System Impact Study Agreement and return it to the Transmission Provider. (ii) shall remit to Transmission Provider all past due amounts of the actual Feasibility Study costs exceeding the Feasibility Study deposit fee contained in Sections 36.1.02, 36.1.03, 110.1, 111.1, and 112.1 of the Tariff, if any, (iii) shall pay the Transmission Provider a deposit as provided in 204.3A below, (iv) shall identify the Point(s) of Interconnection, and (v) in the case of a Generation Interconnection Customer, shall (A) demonstrate that it has made an initial application for the necessary air emission permits, if any, for its proposed generation, (B) specify whether it desires to interconnect its generation to the Transmission System as a Capacity Resource or an Energy Resource, (C) provide required machine modeling data as specified in the PJM Manuals and, (D) in the case of a wind generation facility, provide a detailed electrical design specification and other data (including system layout data) as required by the Transmission Provider for completion of the System Impact Study no later than 6 months after submission of the Generation Interconnection Request; or, (vi) in the case of a Transmission Interconnection Customer, shall (A) provide Transmission Provider with evidence of an ownership interest in, or right to acquire or control, the site(s) where major equipment (e.g., a new transformer or D.C. converter stations) would be installed, such as a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider; (B) demonstrate in a manner acceptable to Transmission Provider that it holds rights to use (or an option to obtain such rights) any existing facilities of the Transmission System that are necessary for construction of the proposed Merchant Transmission Facilities; and (C) provide required modeling data as specified in the PJM Manuals. If an Interconnection Customer fails to comply with any of the applicable listed requirements, its Interconnection Request shall be deemed terminated and withdrawn. If a terminated and withdrawn Interconnection Request was to be included in a System Impact Study evaluating more than one New Service Request, then the costs of the System Impact Study shall be redetermined and reallocated among the remaining participating New Service Customers as specified in this Section 204.

204.3ADeposits: (i) For a proposed Customer Facility that is greater than 100 MW, Interconnection Customer shall pay (a) a non-refundable deposit of \$50,000 and (b) a refundable deposit of \$300 for each MW requested, not to exceed \$300,000; (ii) for a proposed Customer Facility that is greater than 20 MW but equal to or less than 100 MW, Interconnection Customer shall pay a non-refundable deposit of \$500 for each MW requested; (iii) for a proposed Customer Facility that is greater than 2 MWs but equal to or less than 20 MWs, Interconnection Customer shall pay a non-refundable deposit of \$10,000; or (iv) for a proposed Customer Facility that equal to or less than 2 MWs, Interconnection Customer shall pay a non-refundable deposit of \$5,000. The Interconnection Customer is responsible for all actual costs associated with the performance of the System Impact Study related to the Interconnection Request and will be billed for any such costs exceeding the deposits at such time the exceedance is identified. Any unused portion of the non-refundable deposit under (i) through (iv) above will become refundable if the System Impact Study is not completed within 60 days after the expected

completion date specified in Section 5 of Attachment N-1 to the Tariff. Upon completion of the System Impact Study, the Transmission Provider will return any unused refundable deposit monies to Interconnection Customer. Any remaining non-refundable deposit monies will be credited toward the Interconnection Customer's cost responsibility for any other studies conducted for that Interconnection Request under Part VI of the Tariff, which will be applied prior to the deposit monies collected for that other study. If any non-refundable deposit monies remain after all studies are complete, such monies will be returned to a Generation Interconnection Customer upon Initial Operation, or to a Transmission Interconnection Customer upon energization of completed facilities as provided in Attachment GG, Appendix III, Section 20 of the Tariff. If the Interconnection Customer withdraws its Interconnection Request, or is otherwise deemed terminated and withdrawn under this Part VI of the Tariff, any unused portion of the non-refundable deposit will be used to (x) fund Re-Studies due to such withdrawal under Section 205.5 of the Tariff, and (y) fund payments due to Interconnected Transmission Owners and third party contractors, as applicable, as a result of any failure of Interconnection Customer to pay actual study costs as provided herein.

# 205 System Impact Study Procedures:

#### 205.1 Coordination:

The Transmission Provider shall coordinate, to the extent practical, all System Impact Studies conducted pursuant to this Section 205 for New Service Customers. Such coordination may involve, at the Transmission Provider's sole discretion, combining System Impact Studies for multiple New Service Requests into one study. Transmission Provider shall describe in the PJM Manuals the process by which it will coordinate System Impact Studies and Facilities Studies pertaining to different types of New Service Requests.

#### 205.2 Scope of Studies:

The System Impact Study is a comprehensive regional analysis of the effect of adding to the Transmission System the new facilities and services contemporaneously proposed by New Service Customers and an evaluation of their impact on deliverability to the aggregate of PJM Network Load. The System Impact Study identifies the system constraints, identified with specificity by transmission element or flowgate, relating to each proposed new project and service included therein and the Attachment Facilities, Direct Assignment Facilities, Local Upgrades, and/or Network Upgrades required to accommodate such projects. The System Impact Study provides refined and comprehensive estimates of cost responsibility and construction lead times for new facilities and system upgrades. The Transmission Provider, in its sole discretion, may determine to evaluate in the same System Impact Study two or more New Service Requests relating to interconnections, Upgrade Requests, or proposed new transmission services where the associated increases in service or capability are in electrical proximity to each other. Each System Impact Study shall identify the system constraints, identified with specificity by transmission element or flowgate, relating to the New Service Requests being evaluated in the study and, as applicable to each included request, the redispatch options, additional Direct Assignment Facilities, Attachment Facilities, Local Upgrades, and/or Network Upgrades necessary to accommodate such request. The System Impact Study shall refine and more comprehensively estimate each New Service Customer's cost responsibility (determined in accordance with Section 217 of the Tariff) for necessary facilities and upgrades than the estimates provided in the Interconnection Feasibility Study or the Initial Study, if applicable. In the event that more than one New Service Request is evaluated in a study, the Transmission Provider may provide a series of estimates to each participating New Service Customer to reflect the customer's estimated cost responsibility based on varying assumptions regarding the number of New Service Customers that decide to continue their New Service Requests after completion of the System Impact Study. A description of the Transmission Provider's methodology for completing a System Impact Study for Completed Applications is provided in Attachment D of the Tariff. If applicable, the System Impact Study for a Transmission Interconnection Customer shall also include a preliminary estimate of the Incremental Deliverability Rights associated with the customer's proposed Merchant Transmission Facilities.

#### 205,3 Timing of Studies:

The Transmission Provider shall conduct System Impact Studies each year commencing on (i) June 1, for New Service Requests received between November 1 of the previous year and January 31 of the same year, (ii) September 1, for New Service Requests received between February 1 and April 30 of the same year, (iii) December 1, for New Service Requests received between May 1 and July 31 of the same year, and (iv) March 1, for New Service Requests received between August 1 and October 31 of the preceeding year. The Transmission Provider shall use due diligence to complete the System Impact Studies within 120 days of the date the study commences. In the event that the Transmission Provider is unable to complete a System Impact Study within the applicable indicated time period, it shall so notify the affected New Service Customers and the affected Transmission Owner(s) and provide an estimated completion date, along with an explanation of the reasons why additional time is needed to complete the study. The Transmission Provider will use the same due diligence in completing the System Impact Study for a New Service Customer as it uses when completing studies for a Transmission Owner.

#### 205.4 Completion of Studies:

#### 205.4.1 Notice to Eligible Customers:

The Transmission Provider shall notify each Eligible Customer whose Completed Application for new transmission service was included in the System Impact Study upon completion of the System Impact Study whether the Transmission System will be adequate to accommodate all or part of the request for service. In the event that the System Impact Study indicates that no new transmission facilities or upgrades are needed to accommodate the requested service, in order for the Completed Application to retain its Queue Position, within sixty (60) 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 Section 32.4, as applicable, or the Completed Application shall be deemed terminated and withdrawn.

#### 205.4.2 Materials for Customers:

The Transmission Provider shall provide a copy of the System Impact Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in Section 18.17 of the Operating Agreement, related work papers to all New Service Customers that had New Service Requests evaluated in the study and to the affected Transmission Owner(s).

#### 205.4.3 Availability of Information:

Upon completion of the System Impact Study, the Transmission Provider shall post on the Transmission Provider's OASIS (i) the existence of the study, (ii) the New Service Customers that had New Service Requests evaluated in the study, (iii) the location and size in megawatts of each New Service Customer's project or requested rights, as applicable, and (iv) each New Service Customer's Queue Position. The Transmission Provider also shall, to the extent required by the Commission's regulations, make the completed System Impact Study publicly available upon request.

#### 205.4.4 Meeting with Transmission Provider:

At the New Service Customer's request, Transmission Provider, the affected Transmission Owner(s) and the New Service Customer shall meet to discuss the results of the System Impact Study. Such meeting may occur in person or by telephone or video conference.

Effective Date: 3/9/2011 - Docket #: ER11-2648-000

## 205.5 Re-Study:

If a re-study of the System Impact Study is required due to a higher queued New Service Request dropping out of the queue, a modification of a higher queued New Service Request subject to 36.2A, or re-designation of the Point of Interconnection of an Interconnection Request pursuant to Section 36.2.1 or 36.2A, the Transmission Provider shall notify the affected New Service Customer(s) in writing explaining the reason for the re-study. Transmission Provider shall use due diligence to complete such re-study within sixty (60) calendar days from the date of the notice. Any cost of re-study shall be borne by the New Service Customer(s) being restudied.

# 206 Facilities Study Agreement:

Upon completion of the System Impact Study, the Transmission Provider, if it determines that a Facilities Study is required, shall tender to the affected New Service Customer(s) a Facilities Study Agreement in the form included in Attachment N-2 to the Tariff. Transmission Provider, in its sole discretion, may determine to evaluate multiple New Service Requests in the same Facilities Study.

#### 206.1 Study Agreement:

Pursuant to the Facilities Study Agreement, the New Service Customer shall agree to reimburse the Transmission Provider for the cost of a Facilities Study. The Transmission Provider shall provide the New Service Customer with an estimate of the time needed to complete the Facilities Study, the cost of the study, and, if more than one New Service Request is being evaluated in the study, the New Service Customer's allocated share of the costs. The Facilities Study Agreement also may contain reasonable milestone dates that an Interconnection Customer's project must meet for the customer's Interconnection Request to retain its assigned Queue Position pursuant to Section 201 while the Transmission Provider is completing the Facilities Study.

# 206.2 Retaining Queue Position:

For a New Service Request to retain its assigned Queue Position pursuant to Section 201, a New Service Customer must, within 30 days of receipt of the Facilities Study Agreement, (i) remit to Transmission Provide all past due amounts of the actual System Impact Study costs exceeding the System Impact Study deposits contained in Section 204.3A, if any, and (ii) execute and return the Facilities Study Agreement to the Transmission Provider. If a participating New Service Customer fails to remit past due amounts, execute the Facilities Study Agreement or to pay the deposit required under this Section 206, its New Service Request shall be deemed terminated and withdrawn.

#### 206.3 Deposit:

At the time the New Service Customer executes the Facilities Study Agreement, the New Service Customer shall pay a refundable deposit in the amount of \$100,000 or the estimated amount of its Facilities Study cost responsibility for the first three months of work on the study, whichever is greater. Notwithstanding the foregoing, for an Interconnection Customer with a proposed Customer Facility that is: (a) equal to or less than 20 MW but greater than 2 MW shall pay a refundable deposit in the amount of \$50,000; or (b) equal to or less than 2 MW shall pay a refundable deoposit in the amount of \$15,000. Transmission Provider shall retain the deposit until settlement of the final invoice for the Facilities Study, provided, however, in the event that the total estimated cost of the Facilities Study does not exceed the amount of the deposit required under this section, then the deposit may be applied for payment of invoices for the cost of the study. Notwithstanding the preceding sentence, in the event and to the extent that the sum of (i) the aggregate amount timely paid by the New Service Customer pursuant to invoices for the cost of the Facilities Study, and (ii) the amount of the deposit provided by the customer, exceeds 125% of the New Service Customer's total estimated cost responsibility for such study, the customer's deposit shall be applied for payment of invoices for the cost of the study. Application of the New Service Customer's deposit in this manner shall not reduce or otherwise affect its liability for the full cost of the Facilities Study or its full allocated share thereof. Remaining deposit monies, if any, will be returned at the completion of the study or upon withdrawal of the Interconnection Request.

#### 206.4 Allocation of Costs:

In the event more than one New Service Request is being evaluated in a single Facilities Study, the cost of such study shall be allocated among the participating New Service Customers such that (i) each Interconnection Customer pays 100 percent of the study costs associated with evaluating the Attachment Facilities necessary to accommodate its Interconnection Request; (ii) each Eligible Customer pays 100 percent of the study costs associated with evaluating the Direct Assignment Facilities necessary to accommodate its Completed Application for new transmission service; and (iii) each New Service Customer pays the study costs associated with evaluating the Local Upgrades and/or Network Upgrades necessary to accommodate its New Service Request in proportion to its projected cost responsibility (as determined in the System Impact Study) for such upgrades. Each New Service Customer's cost responsibility shall equal its estimated cost responsibility for the work on the Facilities Study scheduled to be completed during each three-month period after such work commences. Transmission Provider's estimates of the required quarterly payments will be stated in the Facilities Study Agreement. If a terminated and withdrawn New Service Request was to be included in a Facilities Study evaluating more than one request, then the costs of the Facilities Study shall be redetermined and reallocated among the remaining participating New Service Customers.

#### 206.4.1 Invoices and Payment:

Except in instances when the total estimated cost of the Facilities Study does not exceed the amount of the deposit required under Section 206.3, Transmission Provider shall invoice New Service Customer on a quarterly basis for work to be conducted on the Facilities Study during the subsequent three months. The initial invoice shall be delivered prior to the start of work and shall be for the cost of work scheduled to be completed during the first three months after work commences. New Service Customer shall pay invoiced amounts within twenty (20) days of receipt of the invoice. Transmission Provider shall continue to hold the amounts on deposit until settlement of the final invoice.

#### 206.4.1.1 Reconciliation of Costs:

New Service Customer may request in writing, prior to or at the time of execution of the Facilities Study Agreement that the Transmission Provider provide a quarterly cost reconciliation provision in the Facilities Study Agreement. Such quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Section 12.B of the Facilities Study Agreement shall govern the timing of the final cost reconciliation upon completion of the study.

#### 206.4.1.2 Failure to Pay:

In the event that a New Service Customer fails to make timely payment of any invoice for work on the Facilities Study, its New Service Request shall be deemed to be terminated and withdrawn as of the date when payment was due.

#### 206.5 Estimates of Certain Upgrade-Related Rights:

#### 206.5.1 Incremental Available Transfer Capability Revenue Rights:

The New Service Customer may request Transmission Provider to provide a non-binding estimate in the Facilities Study of the Incremental Available Transfer Capability Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility. The ultimate assignment of Incremental Available Transfer Capability Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility will be made pursuant to the process set forth in Section 233 of the Tariff.

#### 206.5.2 Incremental Auction Revenue Rights:

The New Service Customer may request Transmission Provider to provide a non-binding estimate in the Facilities Study of the Incremental Auction Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility on up to three (3) pairs of point-to-point combinations. The ultimate assignment of Incremental Auction Revenue Rights associated with the required facilities or upgrades for which the New Service Customer has cost responsibility will be made pursuant to the allocation process set forth in Section 231 of the PJM Tariff and may depend upon the point-to-point combination requests and cost responsibilities of other New Service Customers.

#### 206.5.3 Transmission Injection Rights and Transmission Withdrawal Rights:

The assignment of Transmission Injection Rights and Transmission Withdrawal Rights associated with new Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities will be made in accordance with Section 232 of the Tariff and may depend upon the capabilities of facilities and upgrades necessary to accommodate other New Service Requests.

#### 207 Facilities Study Procedures:

The Transmission Provider will conduct Facilities Studies relating to the New Service Requests that were evaluated in the corresponding System Impact Studies, to the extent such New Service Requests have not been terminated and withdrawn. With respect to Interconnection Requests, the Transmission Provider shall use Reasonable Efforts to complete the Facilities Study and issue it to an Interconnection Customer within 180 days after receipt of an executed Facilities Study Agreement. If Transmission Provider determines that it will not meet the 180 day time frame for completing the Facilities Study, Transmission Provider shall notify Interconnection Customer as to the scheduled status of the Facilities Study. If Transmission Provider is unable to complete the Facilities Study and issue a Facilities Study within 180 days, it shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. When completed, the Facilities Studies will include, commensurate with the degree of engineering specificity on which the New Service Customer and Transmission Provider mutually agree as provided in the Facilities Study Agreement, good faith estimates of the cost, determined in accordance with Section 217 of the Tariff, (a) to be charged to each affected New Service Customer for the (i) Attachment Facilities or Direct Assignment Facilities, and (ii) the Local Upgrades and/or Network Upgrades that are necessary to accommodate each New Service Request evaluated in the study; (b) the time required to complete detailed design and construction of the facilities and upgrades; and (c) a description of any site-specific environmental issues or requirements that could reasonably be anticipated to affect the cost or time required to complete construction of such facilities and upgrades. The Facilities Study will document the engineering design work necessary to begin construction of any required transmission facilities, including estimating the costs of the equipment, engineering, procurement and construction work needed to implement the conclusions of the System Impact Study in accordance with Good Utility Practice and, when applicable, identifying the electrical switching configuration of the connection equipment, including without limitation: the transformer, switchgear, meters, and other station equipment; and the nature and estimated costs of Attachment Facilities, Direct Assignment Facilities, Local Upgrades and/or Network Upgrades necessary to accommodate the New Service Request.

# 207.1 Meeting with Transmission Provider:

At New Service Customer's request, Transmission Provider, the affected Transmission Owner(s) and New Service Customer shall meet to discuss the results of the Facilities Study. Such meeting may occur in person or by telephone or video conference.

## 207.2 Re-Study:

If re-study of the Facilities Study is required due to a higher queued New Service Request dropping out of the queue or a modification of a higher queued New Service Request subject to Section 36.2A, the Transmission Provider shall notify the New Service Customer in writing explaining the reason for the re-study. Transmission Provider shall use due diligence to complete such re-study within sixty (60) calendar days from the date of the notice. Any cost of re-study shall be borne by the New Service Customer being restudied.

## 207.3 Facilities Study Modifications:

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

#### 208 Expedited Procedures for Part II Requests:

In lieu of the procedures set forth above, an Eligible Customer pursuing a Completed Application under Part II of the Tariff shall have the option to expedite the process by requesting the Transmission Provider to tender at one time, together with the results of required studies, an "Expedited Service Agreement" pursuant to which the Eligible Customer would agree to compensate the Transmission Provider or the affected Transmission Owner(s) for all costs incurred pursuant to the terms of the Tariff for purposes of accommodating such customer's Completed Application. 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 to be incurred in providing the requested service. While the Transmission Provider agrees to provide the Eligible Customer with its best estimate (determined in coordination with the affected Transmission Owner(s)) of the new facility costs and other charges that may be incurred, such estimate shall not be binding and the Eligible Customer must agree in writing to compensate the Transmission Provider and the affected Transmission Owner(s) 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.

# 209 Optional Interconnection Studies:

Transmission Provider will undertake Optional Interconnection Studies for Interconnection Customers in accordance with the provisions of this section.

#### 209.1 Optional Interconnection Study Agreement:

Within 30 days from the date when the Interconnection Customer receives the results of the System Impact Study, the Interconnection Customer may request, and upon such request, the Transmission Provider shall perform, up to two Optional Interconnection Studies. A request for such a study shall describe the assumptions that the Interconnection Customer wishes the Transmission Provider to study within the scope described in Section 209.2. Within ten (10) business days after receipt of a request for an Optional Interconnection Study, the Transmission Provider shall provide to the Interconnection Customer an Optional Interconnection Study Agreement in the form included in Attachment N-3 of this Tariff.

#### 209.1.1

The Optional Interconnection Study Agreement shall: (i) specify the technical data that the Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify Interconnection Customer's assumptions regarding any Interconnection Requests with earlier Queue Positions that 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 Provider's estimate of the cost of the Optional Interconnection Study. To the extent known by the Transmission Provider, such estimate shall include any costs expected to be incurred by an Affected System whose participation is necessary to complete the Optional Interconnection Study. Notwithstanding the above, the Transmission Provider shall not be required as a result of a request for an Optional Interconnection Study to conduct any additional New Service Studies with respect to any other New Service Request.

#### 209.1.2

The Interconnection Customer shall execute and deliver the Optional Interconnection Study Agreement, along with the required technical data, and the greater of a \$10,000 deposit or the estimated study cost to the Transmission Provider within ten (10) business days of the Interconnection Customer's receipt of such agreement.

#### 209.2 Scope of Optional Interconnection Study:

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

#### 209.3 Optional Interconnection Study Procedures:

The Transmission Provider shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed upon time period specified in the Optional Interconnection Study Agreement. If the Transmission Provider is unable to complete the Optional Interconnection Study within such time period, it shall notify the Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Any difference between the initial deposit and the actual cost of the study shall be paid to the Transmission Provider or refunded to the Interconnection Customer, as appropriate. Upon request, the Transmission Provider shall provide the 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 222.

# 210 Responsibilities of the Transmission Provider and Transmission Owners:

The Transmission Provider shall be responsible for the preparation of all studies of New Service Requests required by the Tariff. The Transmission Provider may contract with consultants, including the affected Transmission Owner(s), to obtain services or expertise with respect to any such study, including but not limited to the need for Attachment Facilities, Direct Assignment Facilities, and Local Upgrades, estimates of costs and construction times required by Interconnection Feasibility Studies, System Impact Studies, and Facilities Studies, and for information regarding distribution facilities. The Transmission Owners shall supply such information and data reasonably required by the Transmission Provider to perform its obligations under this Part VI.

# Subpart B – Agreements and Cost Responsibility for Customer-Funded Upgrades

#### 211 Interim Interconnection Service Agreement:

Under certain circumstances, an Interconnection Customer may wish to initiate construction activities relating to Attachment Facilities, Local Upgrades, or Network Upgrades on an expedited basis prior to completion of the Facilities Study. One example of such a circumstance is to request that orders be placed for equipment or materials that have a long lead time for delivery. To initiate such an advance of procurement and/or construction activities, the Interconnection Customer may request execution of an Interim Interconnection Service Agreement (in the form included in Attachment O-1 to the Tariff) for the activities being The Interim Interconnection Service Agreement will bind the Interconnection Customer for all costs incurred for the activities being advanced pursuant to the terms of the Tariff. While the Transmission Provider agrees to provide the Interconnection Customer with the best estimate (determined in coordination with affected Transmission Owner(s)) of the new facility costs and other charges that may be incurred for the work being advanced, such estimate shall not be binding and the Interconnection Customer must agree through execution of the Interim Interconnection Service Agreement to compensate the Transmission Provider and the affected Transmission Owner(s) for all costs incurred due to those activities that were advanced. The Transmission Provider shall not be obligated to offer an Interim Interconnection Service Agreement if the 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 Part IV or other parts of this Part VI of the Tariff. The Interim Interconnection Service Agreement is an optional procedure and it will not alter the Interconnection Customer's Queue Position or date of Initial Operation. Interconnection Service Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security, such as a letter of credit or other reasonable form of security acceptable to the Transmission Provider that names the Transmission Provider as beneficiary and is in an amount equivalent to Transmission Provider's estimate of the costs of the procurement and/or construction activities to be advanced pursuant to the Interim Interconnection Service Agreement, consistent with commercial practices as established by the Uniform Commercial Code. Notwithstanding the foregoing, for projects that are estimated to require three months or less to construct, the sum of such security and the payment for the first quarterly invoice for the project shall not exceed an amount equal to 125% of the total estimated cost of the procurement and/or construction activities to be advanced. The Transmission Provider shall provide the affected Transmission Owner(s) with a copy of the letter of credit or other form of security.

#### 211.1 Payment of Costs on Cancellation:

In the event that, after execution of an Interim Interconnection Service Agreement, the Interconnection Customer determines not to complete its interconnection, it shall immediately so notify Transmission Provider. The Interconnection Customer shall be liable for all Cancellation Costs (as defined in Section 1.3BB.03) related to the acquisition, design, construction and/or installation of facilities under the Interim Interconnection Service Agreement, Upon receipt of the Interconnection Customer's notice under this section, Transmission Provider, after consulting with the affected Transmission Owner, may, at the sole cost and expense of the Interconnection Customer, authorize the Transmission Owner to (a) cancel supplier and contractor orders and agreements entered into by the Transmission Owner to acquire and/or design, construct, and install the facilities identified in the Interim Interconnection Service Agreement, provided, however, that the Interconnection Customer shall have the right to choose to take delivery of any equipment ordered by the Transmission Owner for which Transmission Provider otherwise would authorize cancellation of the purchase order; or (b) remove any facilities built by the Transmission Owner or (c) partially or entirely complete construction or installation of such facilities as necessary to preserve the integrity or reliability of the Transmission System, provided that the Interconnection Customer shall be entitled to receive any rights associated with such facilities and upgrades as determined in accordance with Subpart C of Part VI; or (d) undo any of the changes to the Transmission System that were made pursuant to the Interim Interconnection Service Agreement. To the extent that the Interconnection Customer has fully paid for equipment that is unused upon cancellation or which is removed pursuant to clause (b) above, the Interconnection Customer shall have the right to take back title to such equipment; alternatively, in the event that the Interconnection Customer does not wish to take back title, the Transmission Owner may elect to pay the Interconnection Customer a mutually agreed amount to acquire and own such equipment.

#### 212 Interconnection Service Agreement:

Notwithstanding any other provision of the Tariff, this Section 212 shall apply only to Interconnection Customers, excluding those that are proposing Merchant Network Upgrades only for which Section 213 shall apply. Upon completion of the Facilities Study (or, if no Facilities Study was required, upon completion of the System Impact Study), the Transmission Provider shall tender to each Interconnection Customer an Interconnection Service Agreement (in the form included in Attachment O to the Tariff) to be executed by the Interconnection Customer, the Interconnected Transmission Owner and the Transmission Provider.

#### 212.1 Cost Reimbursement:

Pursuant to the Interconnection Service Agreement, an Interconnection Customer shall agree to reimburse the Transmission Provider (for the benefit of the affected Transmission Owners) for the costs, determined in accordance with Section 217 of the Tariff, of (i) constructing Attachment Facilities, Local Upgrades, and Network Upgrades necessary to accommodate its Interconnection Request to the extent that the Transmission Owner, as Interconnected Transmission Owner, is responsible for building such facilities pursuant to the applicable Interconnection Construction Service Agreement, or (ii) in the event that the Interconnection Customer exercises the Option to Build pursuant to Section 3.2.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P to the Tariff), the Transmission Owner's Costs associated with the Interconnection Customer's building such Attachment Facilities, Local Upgrades, and Network Upgrades, including but not limited to Costs for tie-in work and Cancellation Costs. Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activies to satisfy itself that the Interconnection Customer is complying with the Transmission Owner's standards and specifications for the construction of facilities) only if the Transmission Owner and the Interconnection Customer mutually agree to the inclusion of such costs under the Option to Build pursuant to the provisions of Section 3.2.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P of the Tariff). If the Interconnection Customer and the affected Transmission Owner agree and so inform the Transmission Provider, the Interconnection Service Agreement shall specify an appropriate rate that will directly assign and enable the affected Transmission Owner to recover the costs of the pertinent facilities and upgrades. In the absence of such an agreement, the Interconnection Construction Service Agreement shall obligate the Interconnection Customer to reimburse the Transmission Provider (for the benefit of the affected Transmission Owner(s)) as the Transmission Owner's expenditures for the design, engineering, and construction of the facilities that it is responsible for building pursuant to the Interconnection Construction Service Agreement are made. The Transmission Provider shall distribute the revenues received under this Section 212.1 to the affected Transmission Owner(s).

## 212.2 Upgrade-Related Rights:

The Interconnection Service Agreement shall specify the Upgrade-Related Rights that the Interconnection Customer shall receive pursuant to Subpart C of Part VI, except to the extent the applicable terms of Subpart C provide otherwise.

## 212.3 Specification of Transmission Owners Responsible for Facilities and Upgrades:

The Facilities Study shall specify the Transmission Owner(s) that will be responsible, subject to the terms of the applicable Interconnection Construction Service Agreement(s), for the construction of facilities and upgrades, determined in a manner consistent with Schedule 6 of the Operating Agreement.

#### 212.4 Retaining Priority and Security:

- (a) Retaining Priority: To retain the assigned Queue Position of its Interconnection Request pursuant to Section 201, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the Interconnection Customer must execute and return the tendered Interconnection Service Agreement to the Transmission Provider or, alternatively, request (i) dispute resolution under Section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or (ii) that the Interconnection Service Agreement be filed unexecuted with the Commission. In addition, to retain the assigned priority, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the Interconnection Customer must have met the milestones specified in Section 212.5.
- (b) Security: (1) At the time the Interconnection Customer executes and returns to the Transmission Provider the Interconnection Service Agreement (or requests dispute resolution or that it be filed unexecuted), the Interconnection Customer also shall, unless otherwise deferred as set forth in subsection (c) below, provide the Transmission Provider (for the benefit of the affected Transmission Owner(s)) with a letter of credit or other reasonable form of security acceptable to the Transmission Provider that names the Transmission Provider as beneficiary and is in an amount equivalent to the sum of the estimated costs determined by the Transmission Provider of (i) the required Non-Direct Connection Local Upgrades and Non-Direct Connection Network Upgrades, (ii) any Merchant Network Upgrades that the Interconnected Transmission Owner will be responsible for constructing (including with respect to both items (i) and (ii) required upgrades for which another Interconnection Customer also has cost responsibility pursuant to Section 217), and either (iii) the estimated cost of the work that the Transmission Owner will be responsible for performing on the required Attachment Facilities, Direct Connection Local Upgrades, and Direct Connection Network Upgrades that are scheduled to be completed during the first three months after such work commences, or (iv) in the event that the Interconnection Customer exercises the Option to Build pursuant to Section 3.2.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P to the Tariff), all Cancellation Costs and the first three months of estimated Transmission Owner's Costs associated with the Interconnection Customer's building Attachment Facilities, Direct Connection Local Upgrades, and/or Direct Connection Network Upgrades, including but not limited to Costs for tie-in work, consistent with commercial practices as established by the Uniform Commercial Code. Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities to satisfy itself that the Interconnection Customer is complying with the Transmission Owner's standards and specifications for the construction of facilities) only if the Transmission Owner and the Interconnection Customer mutually agree to the inclusion of such costs under the Option to Build pursuant to the provisions of Section 3.2.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P of the Tariff). Notwithstanding the foregoing, for projects that are estimated to require three months or less to construct, the sum of such security and the payment for the first quarterly invoice for the project shall not exceed an amount equal to 125% of the total estimated cost of construction. The Transmission Provider shall provide the affected Transmission Owner(s) with a copy of the letter

of credit or other form of security. After execution of the Interconnection Service Agreement, the amount of security required may be adjusted from time to time in accordance with Section 11.2.1 of Appendix 2 of the Interconnection Service Agreement.

- (2) Transmission Provider shall invoice Interconnection Customer for work by the Interconnected Transmission Owner on a quarterly basis for the costs to be expended in the subsequent three months. Interconnection Customer shall pay invoiced amounts within twenty (20) days of receipt of the invoice. Interconnection Customer may request in the Interconnection Service Agreement that the Transmission Provider provide a quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Section 11.2.3 of Appendix 2 of the Interconnection Service Agreement shall govern the timing of the final cost reconciliation upon completion of the work.
- (3) Transmission Provider shall hold the security related to construction of Attachment Facilities until settlement of the final invoice; security related to construction of Local Upgrades and/or Network Upgrades may be reduced as construction progresses.
- Deferred Security: Interconnection Customer may request to defer providing security (c) under subsection (b) of this Section 212.4 until no later than 120 days after Interconnection Customer executes the Interconnection Service Agreement. Upon Interconnection Customer's request to defer security, PJM shall determine if any other queued New Service Customer with a completed System Impact Study would require any Local Upgrade(s) and/or Network Upgrade(s) for which Interconnection Customer has cost responsibility under the Interconnection Service Agreement, Interconnection Customer may defer security only for Local Upgrade(s) and/or Network Upgrade(s) for which no other such queued New Service Customer may require, provided Interconnection Customer shall pay a deposit of at least \$200,000 or 125% of the estimated costs that will be incurred during the 120-day period, whichever is greater, to fund continued design work and/or procurement activities on such non-shared Local Upgrade(s) and/or Network Upgrade(s), with \$100,000 of such deposit being non-refundable. If the Interconnection Customer terminates the Interconnection Service Agreement or is otherwise withdrawn, any unused portion of the non-refundable deposit will be used to fund re-studies due to such termination or withdrawal. Any remaining deposit monies, refundable or nonrefundable, will be returned to an Interconnection Customer upon Initial Operation.
- (d) Withdrawal: If an Interconnection Customer fails to timely execute the Interconnection Service Agreement (or request dispute resolution or that the agreement be filed unexecuted), meet the milestones (unless extended) set forth in Section 212.5, or provide the security prescribed in this Section 212.4, its Interconnection Request shall be deemed terminated and withdrawn. In the event that a terminated and withdrawn Interconnection Request was included in a Facilities Study that evaluated more than one New Service Request, or in the event that a New Service Customer's participation in and cost responsibility for a Network Upgrade or Local Upgrade is terminated in accordance with Subpart C of Part VI of the Tariff, the Transmission Provider shall reevaluate the need for the facilities and upgrades indicated by the Facilities Study, shall re-determine the cost responsibility of each remaining New Service Customer for the necessary facilities and upgrades based on its assigned priority pursuant to Section 201, and shall

enter into an amended Interconnection Service Agreement with each remaining Interconnection Customer setting forth its revised cost obligation. In such event, if the amount of an Interconnection Customer's cost responsibility increases, the Interconnection Customer shall provide additional security pursuant to this Section 212.4.

Effective Date: 5/16/2011 - Docket #: ER11-3085-000

#### 212.5 Milestones:

In order to proceed with an Interconnection Service Agreement, within 60 days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), (a) a Generation Interconnection Customer must demonstrate that it has (i) entered a fuel delivery agreement and water agreement, if necessary, and that it controls any necessary rightsof-way for fuel and water interconnections, (ii) obtained any necessary local, county, and state site permits, and (iii) signed a memorandum of understanding for the acquisition of major equipment, and (b) a Transmission Interconnection Customer must demonstrate that it has (i) obtained any necessary local, county, and state siting permits or other required approvals for the construction of its proposed Merchant D.C. Transmission Facilities or Merchant Controllable A.C. Transmission Facilities, and (ii) signed a memorandum of understanding for the acquisition of major equipment. The Transmission Provider also may include other reasonable milestone dates in the Interconnection Service Agreement for the construction of the Interconnection Customer's generation project that, if not met, shall relieve the Transmission Provider and the Transmission Owners from the requirement to construct the necessary facilities and upgrades and be deemed a termination and withdrawal of the Interconnection Request. Such milestones may include site acquisition, permitting, regulatory certifications (if required), acquisition of any necessary third-party financial commitments, commercial operation, and similar events. The Transmission Provider may reasonably extend any such milestone dates (including those required in order to proceed with an Interconnection Service Agreement) in the event of delays not caused by the Interconnection Customer, such as unforeseen regulatory or construction delays that could not be remedied by the Interconnection Customer through the exercise of due diligence. Milestone dates stated in the Interconnection Service Agreement shall be deemed to be extended coextensively with any suspension of work initiated by Interconnection Customer in accordance with the Interconnection Construction Service Agreement. withdrawal of an Interconnection Request for failure to meet a milestone shall not relieve the Interconnection Customer from reimbursing the Transmission Provider (for the benefit of the affected Transmission Owner(s)) for the costs incurred prior to such termination and withdrawal.

# 212.6 Interconnection Construction Service Agreement and Commencement of Construction:

For all interconnections within the scope of this Section 212 for which construction of facilities is required, Transmission Provider shall tender to the Interconnection Customer an Interconnection Construction Service Agreement relating to such facilities within 45 days after receipt of the executed Interconnection Service Agreement. In the event that construction of facilities by more than one Transmission Owner is required, the Transmission Provider will tender a separate Interconnection Construction Service Agreement for each such Transmission Owner and the facilities to be constructed on its transmission system. Within ninety (90) calendar days of receipt thereof, unless otherwise specified in the project specific milestones of the Interconnection Service Agreement, Interconnection Customer shall either execute and return the Interconnection Construction Service Agreement to the Transmission Provider, or, alternatively, shall request dispute resolution under Section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or that the Interconnection Construction Service Agreement be filed unexecuted with the Commission. In the event that the Interconnection Customer has requested dispute resolution or that the Interconnection Service Agreement be filed unexecuted, construction of facilities and upgrades shall be deferred until any disputes are resolved, unless otherwise agreed by the Interconnection Customer, the Interconnected Transmission Owner and the Transmission Provider.

# 213 Upgrade Construction Service Agreement:

Notwithstanding any other provision of the Tariff, this Section 213 shall apply only with respect to (a) Interconnection Customers that are proposing Merchant Network Upgrades only, and (b) all other New Service Customers that are not Interconnection Customers. For all New Service Requests of New Service Customers subject to this section and for which construction of facilities is required, upon completion of the Facilities Study (or, if no Facilities Study was required, upon completion of the System Impact Study), the Transmission Provider shall tender to the New Service Customer an Upgrade Construction Service Agreement (in the form included in Attachment GG to the Tariff), to be executed by the New Service Customer, the Transmission Owner whose facilities are affected by such construction, and the Transmission Provider. In the event that construction of facilities by more than one Transmission Owner is required, the Transmission Provider will tender a seaprate Upgrade Construction Service Agreement for each such Transmission Owner and the facilities to be constructed on its transmission system.

#### 213.1 Cost Reimbursement:

Pursuant to the Upgrade Construction Service Agreement, a New Service Customer shall agree to reimburse the Transmission Provider (for the benefit of the affected Transmission Owners) for the costs, determined in accordance with Section 217 of the Tariff, of (i) constructing Direct Assignment Facilities, Local Upgrades, and/or Network Upgrades necessary to accommodate its New Service Request to the extent that the Transmission Owner is responsible for building such facilities pursuant to Part VI of the Tariff and the applicable Upgrade Construction Service Agreement, or (ii) in the event that the New Service Customer exercises the Option to Build pursuant to Section 6.2.1 of Appendix III of the form of Upgrade Construction Service Agreement (set forth in Attachment GG to the Tariff), the Transmission Owner's Costs associated with the New Service Customer's building such Direct Assignment Facilities, Local Upgrades, and/or Network Upgrades, including but not limited to Costs for tie-in work and Cancellation Costs. Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activies to satisfy itself that the New Service Customer is complying with the Transmission Owner's standards and specifications for the construction of facilities) only if the Transmission Owner and the New Service Customer mutually agree to the inclusion of such costs under the Option to Build pursuant to the provisions of Section 6.2.1 of Appendix III of the form of Upgrade Construction Service Agreement (set forth in Attachment GG of the Tariff). The Upgrade Construction Service Agreement shall obligate the New Service Customer to reimburse the Transmission Provider (for the benefit of the affected Transmission Owner(s)) as the Transmission Owner's expenditures for the design, engineering, and construction of the facilities that it is responsible for building pursuant to the Upgrade Construction Service Agreement are made. The Transmission Provider shall distribute the revenues received under this Section 213.1 to the affected Transmission Owner(s).

# 213.2 Upgrade-Related Rights:

The Upgrade Construction Service Agreement shall specify the Upgrade-Related Rights to which the New Service Customer is entitled pursuant to Subpart C of Part VI, except to the extent the applicable terms of Subpart C provide otherwise.

## 213.3 Specification of Transmission Owners Responsible for Facilities and Upgrades:

The Facilities Study shall specify the Transmission Owner(s) that will be responsible, subject to the terms of the applicable Upgrade Construction Service Agreement, for the construction of facilities and upgrades, determined in a manner consistent with Schedule 6 of the Operating Agreement.