# 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

This Part IV shall apply to apply to New Service Requests received prior to April 1, 2018. 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 Tariff, Part IV. Tariff, Part IV, Subpart G and related portions of the PJM Manuals apply to Interconnection Requests involving new Small Generation Resources or increases of 20 MW or less to the capability of existing generation resources over any consecutive 24-month period. Upgrade Customers that propose Upgrade Requests seeking Incremental Auction Revenue Rights shall also comply with the terms, conditions, and procedures set forth in Tariff, Part VI. Tariff, Part VI contains 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. Notwithstanding the foregoing, by August 31 of each calendar year, PJM shall solicit requests from Generation Owners of Intermittent Resources and Environmentally Limited Resources which seek to obtain additional Capacity Interconnection Rights related to the winter period (defined as November through April of a Delivery Year) for the purposes of aggregation under the Tariff, Attachment DD. Such additional Capacity Interconnection Rights would be for a one-year period as specified by PJM in the solicitation. Responses to such solicitation must be submitted by such interested Generation Owners by October 31 prior to the upcoming Base Residual Auction. Such requests shall be studied for deliverability similar to any Generation Interconnection Customer seeking to enter the New Services Queue; however, such requests shall not be required to enter the New Services Queue. PJM shall study such requests in a manner so as to prevent infringement on available system capabilities of any resource which is already in service, or which has an executed Interconnection Service Agreement, Transmission Service Agreement, Upgrade Construction Service Agreement, or has obtained a Queue Position in the New Services Queue.

New Service Requests received on or after April 1, 2018 will be subject to the Generation Interconnection Procedures set forth in Tariff, Part VII or Tariff, Part VIII, as applicable.

## Subpart A – INTERCONNECTION PROCEDURES

# 36 Interconnection Requests

## 36.1 General:

Generation Interconnection Requests and Transmission Interconnection Requests shall be governed by Tariff, Part IV, Subpart A, 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, to increase the capacity of generation already interconnected in, the PJM Region shall submit to the Transmission Provider a Generation Interconnection Request. The Transmission Provider shall acknowledge receipt of the Generation Interconnection Request (electronically when available to all parties, otherwise written) within five Business Days after receipt of the Generation Interconnection Request.

1. Generation Interconnection Request Requirements. To be assigned a PJM Queue Position pursuant to Tariff, Part IV, Preamble, section 201, a Generation Interconnection Customer must submit a complete and fully executed Generation Interconnection Feasibility Study Agreement, a form of which is located in the Tariff, Attachment N. To be considered complete at the time of submission, the Interconnection Customer's Generation Interconnection Feasibility Study Agreement must include, at a minimum, each of the following:

    a. specification of the location of the proposed Generating Facility site or existing Generating Facility (include both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the generating unit site); and

    b. evidence of an ownership interest in, or right to acquire or control the Generating Facility site for a minimum of three years, such as a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider; and

    c. the MW size of the proposed Generating Facility or the amount of increase in MW capability of an existing Generating Facility, and identification of any MW portion of the facility's capability that will be a Capacity Resource; and

    d. identification of the fuel type of the proposed generating unit or upgrade thereto; and

    e. a description of the equipment configuration, and a set of preliminary electrical design specifications, and, if the generating unit is a wind generation facility, then the set of preliminary electrical design specifications must depict the wind plant as a single equivalent generator; and

f. the planned date the proposed generating unit or increase in MW capability of an existing generating unit will be in service, where such date is to be no more than seven years from the date that a complete and fully executed Generation Interconnection Feasibility Study Agreement is received by the Transmission Provider unless the Interconnection Customer demonstrates that engineering, permitting, and construction of the generating unit or increase in capability will take more than seven years; and

g. any additional information as may be prescribed by the Transmission Provider in the PJM Manuals, including a description of how the full electrical generating capability of the generating unit will be limited to the Maximum Facility Output requested if the Maximum Facility Output of the generating unit is less than the full electrical generating capability of the Generating Facility; and

h. if Behind The Meter Generation is identified in the Generation Interconnection Feasibility Study Agreement, all of the requirements in Tariff, Part IV, Subpart A, section 36.1A must also be met; and

i. Deposit.

i. A deposit shall be submitted to Transmission Provider, as follows:

(1) Provided that the maximum total deposit amount for a Generation Interconnection Request submitted in the first four calendar months of the current New Services Queue shall not exceed $110,000, a deposit of $10,000 plus $100 for each MW requested if the Generation Interconnection Request is received in the first four calendar months of the current New Services Queue; or

(2) Provided that the maximum total deposit amount for a Generation Interconnection Request submitted in the fifth calendar month of the current New Services Queue shall not exceed $120,000, a deposit of $20,000 plus $150 for each MW requested if the Generation Interconnection Request is received in the fifth calendar month of the current New Services Queue; or

(3) Provided that the maximum total deposit amount for a Generation Interconnection Request submitted in the sixth calendar month of the current New Services Queue shall not exceed $130,000 a deposit of $30,000 plus $200 for each MW requested, if the Generation Interconnection Request is received in the sixth calendar month of the current New Services Queue.

ii. 10% of each total deposit amount is non-refundable. Any unused non-refundable deposit monies shall be returned to the Generation Interconnection Customer upon Initial Operation. However, if, before reaching Initial Operation, the Generation Interconnection Customer withdraws its Generation Interconnection Request, or the Generation Interconnection Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:

(1) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Generation Interconnection Request and/or associated Queue Position; and/or

(2) Any restudies required as a result of the rejection, termination and/or withdrawal of such Generation Interconnection Request; and/or

(3) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer.

iii. 90% of each total deposit amount is refundable, and the Transmission Provider shall utilize, in no particular order, the refundable portion of each total deposit amount to cover the following:

(1) The cost of the Queue Position acceptance review; and

(2) The cost of the deficiency review of the Interconnection Customer's Generation Interconnection Request (to determine whether the Generation Interconnection Request is valid); and

(3) The dollar amount of the Interconnection Customer's cost responsibility for the Generation Interconnection Feasibility Study; and

(4) If the Generation Interconnection Request is deemed to be modified (pursuant to Tariff, Part IV, Subpart A, section 36.2A), rejected, terminated and/or withdrawn during the deficiency review and/or deficiency response period (as described further below), or during the Feasibility Study period, the refundable deposit money shall be applied to

cover all of the costs incurred by the Transmission Provider up to the point of such Generation Interconnection Request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:

(a) The costs of any restudies required as a result of the modification (pursuant to Tariff, Part IV, Subpart A, section 36.2A), rejection, termination and/or withdrawal of such Generation Interconnection Request; and/or

(b) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Generation Interconnection Request and/or associated Queue Position; and/or

(c) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer.

(d) If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to the Generation Interconnection Customer in accordance with the PJM Manuals.

iv. Upon completion of the Feasibility Study, the Transmission Provider shall apply any remaining refundable deposit monies toward:

(1) The Interconnection Customer's cost responsibility for any other studies conducted for the Generation Interconnection Request under Tariff, Part VI, which shall be applied prior to the deposit monies collected for such other studies; and/or

(2) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related

to prior Generation Interconnection Requests by the Interconnection Customer.

v. If any refundable deposit monies remain after the Feasibility Study is complete and any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer have been paid, such remaining deposit monies shall be returned to the Generation Interconnection Customer.

vi. The Interconnection Customer must submit the total required deposit amount with the Generation Interconnection Request. If the Interconnection Customer fails to submit the total required deposit amount with the Generation Interconnection Request, the Generation Interconnection Request shall be deemed to be terminated and withdrawn (i.e., the Generation Interconnection Request shall be terminated prior to reaching the deficiency review stage).

vii. Deposit monies are non-transferrable. Under no circumstances may refundable or non-refundable deposit monies for a specific Interconnection Request or Queue Position be applied in whole or in part to a different New Service Request or Interconnection Request or Queue Position.

j. Primary frequency response operating range for Energy Storage Resources.

2. Deficiency Review. Transmission Provider shall provide a deficiency review of the Generation Interconnection Request to determine whether the Interconnection Customer submitted a valid Generation Interconnection Request.

a. With the exception of evidence of an ownership interest in, or right to acquire or control the generating unit site for a minimum of three years, if a Generation Interconnection Request meets all requirements set forth above the Transmission Provider shall start the deficiency review. While deficiency reviews may commence for Generation Interconnection Requests that are submitted without site control evidence that is acceptable to the Transmission Provider, such Generation Interconnection Requests shall not be assigned a Queue Position until the Transmission Provider receives site control evidence that is acceptable to the Transmission Provider.

b. Pursuant to Tariff, Attachment N, section 9, Cost Responsibility, of the Generation Interconnection Feasibility Study Agreement, if the Transmission Provider anticipates that the actual study costs will exceed

the refundable portion of the required deposit, the Transmission Provider shall provide the Interconnection Customer with an estimate of the additional study costs. The estimated additional study costs are non-binding, and additional actual study costs may exceed the estimated additional study cost increases provided by the Transmission Provider. Regardless of whether the Transmission Provider provides the Interconnection Customer with estimated additional study costs, the Interconnection Customer is responsible for and must pay all actual study costs.

i. If the Transmission Provider sends the Interconnection Customer notification of estimated additional study costs during the deficiency review period (as described below), then the Interconnection Customer must either:

(1) Withdraw the Generation Interconnection Request during the deficiency response period (as described below); or

(2) Pay all estimated additional study costs prior to the expiration of the deficiency response period (as described below).

(3) If the Interconnection Customer fails to complete either (1) or (2) above, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

ii. If at any time after the deficiency review period the Transmission Provider provides the Interconnection Customer with notification of estimated additional study costs, the Interconnection Customer must pay such estimated additional study costs within ten Business Days of Transmission Provider sending the Interconnection Customer notification of such estimated additional study costs. If the Interconnection Customer fails to pay such estimated additional study costs within ten Business Days of Transmission Provider sending the Interconnection Customer notification of such estimated additional study costs, then the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

c. If there are deficiencies in the Generation Interconnection Request for any of the requirements set forth above, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to notify the Interconnection Customer (electronically when available to all parties, otherwise written) within fifteen Business Days of receipt of the Generation Interconnection Request that such Generation Interconnection Request is deficient. If Transmission Provider is unable to provide a deficiency review within fifteen Business Days from receipt

of the Generation Interconnection Request, Transmission Provider shall use Reasonable Efforts to complete and issue the deficiency review to the Interconnection Customer as soon thereafter as practicable, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. This notification is referred to as a deficiency notice.

i. The deficiency notice shall clearly set forth the basis upon which the deficiency determination was made.

ii. The Interconnection Customer shall be provided ten Business Days to respond to the deficiency notice. This ten Business Day period is referred to as the deficiency response period.

(1) Within the deficiency response period, the Interconnection Customer shall provide, in full, the additional information and/or evidence (such as generation site control) and/or monies that the Transmission Provider's deficiency notice identified as being required to constitute a valid Generation Interconnection Request.

(2) If the Interconnection Customer fails to clear within the deficiency response period all deficiencies identified by the Transmission Provider in the deficiency notice, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

iii. Without regard to the timing of the Interconnection Customer's deficiency response period, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to review each Interconnection Customer's response to the deficiency notice within fifteen Business Days of the Interconnection Customer submitting its response to the deficiency notice. If Transmission Provider is unable to complete its review of Interconnection Customer's response to the deficiency notice within fifteen Business Days of receiving the response, Transmission Provider shall use Reasonable Efforts to complete such review as soon thereafter as practicable, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. If the Generation Interconnection Request is still deficient after the Transmission Provider's review of Interconnection Customer's response to the deficiency notice and the full ten Business Days of the Interconnection Customer's deficiency response period have expired, the Generation

Interconnection Request shall be deemed to be terminated and withdrawn.

iv. If the Interconnection Customer fails to respond in full to the Transmission Provider's deficiency notice (including failing to provide all of the additional required information, evidence and/or make payments on any outstanding invoices required by the Transmission Provider's deficiency notice), the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

3. The Interconnection Customer must submit a complete and fully executed Generation Interconnection Feasibility Study Agreement (Tariff, Attachment N) to the Transmission Provider by March 10 for the New Services Queue ending March 31, and by September 10 for the New Services Queue ending September 30. No Generation Interconnection Requests shall be accepted for the relevant New Services Queue after such dates.

4. In accordance with Tariff, Part VI, Preamble, section 201, the Transmission Provider shall assign Queue Positions as of the date and time of receipt of all information required pursuant to this section 36.1.01. If the information required pursuant to this section 36.1.01 is provided to the Transmission Provider in separate submissions, the Queue Position shall be assigned based on the date and time of receipt of the last required piece of information.

5. Deficiency notices shall be considered cleared as of the date and time the Transmission Provider receives from the Interconnection Customer the last piece of required information deemed acceptable by the Transmission Provider to clear such deficiency notice.

6. Transmission Provider Website Postings.

a. The Transmission Provider shall maintain on the Transmission Provider's website a list of all Generation Interconnection Requests that identifies:

i. the proposed maximum summer and winter megawatt electrical output;

ii. the location of the generation by county and state;

iii. the station or transmission line or lines where the interconnection will be made;

iv. the facility's projected date of Initial Operation;

v. the status of the Generation Interconnection Request, including its Queue Position;

vi. the type of Generation Interconnection Service requested;

vii. the availability of any studies related to the Interconnection Request;

viii. the date of the Generation Interconnection Request;

ix. the type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); and

x. for each Generation Interconnection Request that has not resulted in a completed interconnection, an explanation of why it was not completed.

b. This list will not disclose the identity of the Generation Interconnection Customer, except as otherwise provided in Tariff, Part IV. The list and the priority of Generation Interconnection Requests shall be included on the Transmission Provider's 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 Tariff, Part IV, Subpart G 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 shall submit to the Transmission Provider a Transmission Interconnection Request. The Transmission Provider shall acknowledge receipt of the Transmission Interconnection Request (electronically when available to all parties, otherwise written) within five Business Days after receipt of the Transmission Interconnection Request.

1. Transmission Interconnection Request Requirements. To be assigned a PJM Queue Position pursuant to Tariff, Part VI, Preamble, section 201, a Transmission Interconnection Customer must submit a complete and fully executed Transmission Interconnection Feasibility Study Agreement, a form of which is located in the Tariff, Attachment S. To be considered complete at the time of submission, the Interconnection Customer's Transmission Interconnection Feasibility Study Agreement must include, at a minimum, each of the following:

a. 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; and

b. a description of the proposed Merchant Transmission Facilities; and

c. the nominal capability or increase in capability (in megawatts) of the proposed Merchant Transmission Facilities; and

d. 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; and

e. 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; and

i. Transmission Injection Rights and/or Transmission Withdrawal Rights, or

ii. 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;

f. if the Transmission Interconnection Customer will be eligible to receive Incremental Deliverability Rights under Tariff, Part VI, Subpart C, section 235, 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; and

g. any additional information as may be prescribed by the Transmission Provider in the PJM Manuals; and

h. Deposit.

i. A deposit shall be submitted to the Transmission Provider as follows:

(1) Provided that the maximum total deposit amount for a Transmission Interconnection Request submitted in the first four calendar months of the current New Services Queue

shall not exceed $110,000, a deposit of $10,000 plus $100 for each MW requested if the Transmission Interconnection Request is received in the first four calendar months of the current New Services Queue; or

(2) Provided that the maximum total deposit amount for a Transmission Interconnection Request submitted in the fifth calendar month of the current New Services Queue shall not exceed $120,000, a deposit of $20,000 plus $150 for each MW requested if the Transmission Interconnection Request is received within the fifth calendar month of the current New Services Queue; or

(3) Provided that the maximum total deposit amount for a Transmission Interconnection Request submitted in the sixth calendar month of the current New Services Queue shall not exceed $130,000, a deposit of $30,000 plus $200 for each MW requested, if the Transmission Interconnection Request is received within the sixth calendar month of the current New Services Queue.

ii. 10% of each total deposit amount is non-refundable. Any unused non-refundable deposit monies shall be returned to the Transmission Interconnection Customer upon Initial Operation. However, if, before reaching Initial Operation, the Transmission Interconnection Customer withdraws its Transmission Interconnection Request, or the Transmission Interconnection Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:

(1) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Transmission Interconnection Request and/or associated Queue Position; and/or

(2) Any restudies required as a result of the rejection, termination and/or withdrawal of such Transmission Interconnection Request; and/or

(3) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Transmission and/or

Generation Interconnection Requests by the Interconnection Customer.

iii. 90% of each total deposit amount is refundable, and the Transmission Provider shall utilize, in no particular order, the refundable portion of each total deposit amount to cover the following:

(1) The cost of the Queue Position acceptance review; and

(2) The cost of the deficiency review of the Interconnection Customer's Transmission Interconnection Request (to determine whether the Transmission Interconnection Request is valid); and

(3) The dollar amount of the Interconnection Customer's cost responsibility for the Transmission Interconnection Feasibility Study; and

(4) If the Transmission Interconnection Request is deemed to be modified (pursuant to Tariff, Part IV, Subpart A, section 36.2A), rejected, terminated and/or withdrawn during the deficiency review and/or deficiency response period (as described further below), or during the Feasibility Study period, the refundable deposit money shall be applied to cover all of the costs incurred by the Transmission Provider up to the point of such Transmission Interconnection Request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:

(a) The costs of any restudies required as a result of the modification, rejection termination and/or withdrawal of such Transmission Interconnection Request; and/or

(b) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Transmission Interconnection Request and/or associated Queue Position; and/or

(c) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service

Requests and/or Transmission and/or Generation Interconnection Requests by the Interconnection Customer.

(d) If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to the Interconnection Customer in accordance with the PJM Manuals.

iv. Upon completion of the Transmission Interconnection Feasibility Study, the Transmission Provider shall apply any remaining refundable deposit monies toward:

(1) The Interconnection Customer's cost responsibility for any other studies conducted for the Transmission Interconnection Request under Tariff, Part VI, which shall be applied prior to the deposit monies collected for such other studies; and/or

(2) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Transmission and/or Generation Interconnection Requests by the Interconnection Customer.

v. If any refundable deposit monies remain after the Feasibility Study is complete and any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Transmission and/or Generation Interconnection Requests by the Interconnection Customer have been paid, such remaining deposit monies shall be returned to the Interconnection Customer.

vi. The Interconnection Customer must submit the total required deposit amount with the Transmission Interconnection Request. If the Interconnection Customer fails to submit the total required deposit amount with the Transmission Interconnection Request, the Transmission Interconnection Request shall be deemed to be terminated and withdrawn (i.e., the Transmission Interconnection Request shall be terminated prior to reaching the deficiency review stage).

vii. Deposit monies are non-transferrable. Under no circumstances may refundable or non-refundable deposit monies for a specific Interconnection Request or Queue Position be applied in whole or

in part to a different New Service Request or Interconnection Request or Queue Position.

2. Deficiency Review. Transmission Provider shall provide a deficiency review of the Transmission Interconnection Request to determine whether the Interconnection Customer submitted a valid Transmission Interconnection Request.

a. If a Transmission Interconnection Request meets all requirements set forth above, the Transmission Provider shall start the deficiency review.

b. Pursuant to Tariff, Attachment S, section 9, Cost Responsibility, of the Transmission Interconnection Feasibility Study Agreement, if the Transmission Provider anticipates that the actual study costs will exceed the refundable portion of the required deposit, the Transmission Provider shall provide the Interconnection Customer with an estimate of the additional study costs. The estimated additional study costs are non-binding, and additional actual study costs may exceed the estimated additional study cost increases provided by the Transmission Provider. Regardless of whether the Transmission Provider provides the Interconnection Customer with estimated additional study costs, the Interconnection Customer is responsible for and must pay all actual study costs.

i. If the Transmission Provider sends the Interconnection Customer notification of estimated additional study costs during the deficiency review period (as described below), then the Interconnection Customer must either:

(1) Withdraw the Interconnection Request during the deficiency response period (as described below); or

(2) Pay all estimated additional study costs prior to the expiration of the deficiency response period (as described below).

(3) If the Interconnection Customer fails to complete either (1) or (2) above, the Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

ii. If at any time after the deficiency review period the Transmission Provider provides the Interconnection Customer with notification of estimated additional study costs, the Interconnection Customer must pay such estimated additional study costs within ten Business Days of Transmission Provider sending the Interconnection Customer notification of such estimated additional study costs. If the Interconnection Customer fails to pay such estimated additional study costs within ten Business Days of Transmission Provider

sending the Interconnection Customer notification of such estimated additional study costs, then the Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

c. If there are deficiencies in the Transmission Interconnection Request for any of the requirements set forth above, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to notify the Interconnection Customer (electronically when available to all parties, otherwise written) within fifteen Business Days of receipt of the Transmission Interconnection Request that such Transmission Interconnection Request is deficient. If Transmission Provider is unable to provide a deficiency review within fifteen Business Days from receipt of the Transmission Interconnection Request, Transmission Provider shall use Reasonable Efforts to complete and issue the deficiency review to the Interconnection Customer as soon thereafter as practicable, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. This notification is referred to as a deficiency notice.

i. The deficiency notice shall clearly set forth the basis upon which the deficiency determination was made.

ii. The Interconnection Customer shall be provided ten Business Days to respond to the deficiency notice. This ten Business Day period is referred to as the deficiency response period.

(1) Within the deficiency response period, the Interconnection Customer shall provide, in full, the additional information and/or monies that the Transmission Provider's deficiency notice identified as being required to constitute a valid Transmission Interconnection Request.

(2) If the Interconnection Customer fails to clear within the deficiency response period all deficiencies identified by the Transmission Provider in the deficiency notice, the Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

iii. Without regard to the timing of the Interconnection Customer's deficiency response period, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to review the Interconnection Customer's response to the deficiency notice within fifteen Business Days of the Interconnection Customer submitting its response to the deficiency

notice. If Transmission Provider is unable to complete its review of Interconnection Customer's response to the deficiency notice within fifteen Business Days of receiving the response, Transmission Provider shall use Reasonable Efforts to complete such review as soon thereafter as practicable, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. If the Transmission Interconnection Request is still deficient after the Transmission Provider's review of Interconnection Customer's response to the deficiency notice and the full ten Business Days of the Interconnection Customer's deficiency response period have expired, the Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

iv. If the Interconnection Customer fails to respond in full to the Transmission Provider's deficiency notice (including failing to provide all of the additional required information, evidence and/or make payments on any outstanding invoices required by the Transmission Provider's deficiency notice), the Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

3. The Interconnection Customer must submit a complete and fully executed Transmission Interconnection Feasibility Study Agreement (Tariff, Attachment S) to the Transmission Provider by March 10 for the New Services Queue ending March 31, and by September 10 for the New Services Queue ending September 30. No Transmission Interconnection Requests shall be accepted for the relevant New Services Queue after such dates.

4. The Transmission Provider shall assign Queue Positions pursuant to Tariff, Part VI, Preamble, section 201 on the date and time of receipt of all the required information set forth in this section 36.1.03.

5. Deficiencies shall be considered cleared as of the date and time the Transmission Provider receives from the Interconnection Customer the last piece of required information deemed acceptable by the Transmission Provider to clear such deficiency notice.

6. Adjacent Control Area Stipulation. If applicable, within 30 calendar days of submitting its Transmission Interconnection Request, the Interconnection Customer shall provide evidence acceptable to the Transmission Provider that Interconnection Customer has submitted a valid interconnection request with the adjacent Control Area(s) in which it is interconnecting. Transmission Interconnection Customer shall maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request

process for the relevant PJM Transmission Interconnection Request. If Interconnection Customer fails to maintain its queue position(s) with such adjacent Control Area(s) throughout the entire PJM Transmission Interconnection Request process for the relevant PJM Transmission Interconnection Request, the relevant PJM Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

7. Transmission Provider Website Postings.

a. The Transmission Provider shall maintain on the Transmission Provider's website a list of all Transmission Interconnection Requests that identifies:

i. in megawatts the potential nominal capability or increase in capability;

ii. the location of the Merchant Transmission Facilities by county and state;

iii. the station or transmission line or lines where the interconnection will be made;

iv. the facility's projected date of Initial Operation;

v. the status of the Transmission Interconnection Request, including its Queue Position;

vi. the availability of any studies related to the Interconnection Request;

vii. the date of the Transmission Interconnection Request;

viii. the type of Merchant Transmission Facilities to be constructed; and

ix. for each Transmission Interconnection Request that has not resulted in a completed interconnection, an explanation of why it was not completed.

b. This list will not disclose the identity of the Transmission Interconnection Customer, except as otherwise provided in Tariff, Part IV or Tariff, Part VI. The list and the priority of Transmission Interconnection Requests shall be included on the Transmission Provider's website as a part of the New Services Queue.

**36.1.03A Transmission Interconnection Customers Requesting Merchant Network Upgrades**

Notwithstanding Tariff, Part IV, Subpart A, section 36.1.03, an Interconnection Customer that proposes Merchant Network Upgrades (including advancing pursuant to Tariff, Part VI, Subpart

B, section 220 or accelerating 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 Operating Agreement, Schedule 6) shall submit an Upgrade Request, with the required information and the required deposit for a System Impact Study, as set forth in Tariff, Attachment EE.

**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 Tariff, Part III. Capacity Resources also may participate in Reliability Pricing Model Auctions and in Ancillary Services markets pursuant to the 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 the contingency criteria in the Applicable Standards. 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 Operating Agreement, Schedule 1, section 1.7.4(i), 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.

**36.1.1A Service Below Generating Capability**

The Transmission Provider shall consider requests for Interconnection Service below the full electrical generating capability of the Generating Facility. These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of determining Interconnection Facilities, Network Upgrades, and associated costs, but may be subject to other studies at the full electrical generating capability of the Generating Facility to ensure the safety and reliability of the system, with the study costs borne by the Interconnection Customer. If after additional studies are complete, Transmission Provider determines that additional Network Upgrades are necessary, then Transmission Provider must: (i) specify which additional Network Upgrade costs are based on which studies; and (ii) provide a detailed explanation of why the additional Network Upgrades are necessary. Any Interconnection Facility and/or Network Upgrades costs required for safety and reliability also will be borne by the Interconnection Customer. Interconnection Customers may be subject to additional control technologies as well as testing and validation of these technologies as set forth in the Interconnection Service Agreement. The necessary control technologies and protection systems shall be established in Tariff, Attachment O, Schedule K (Requirements for Interconnection

Service Below Full Electrical Generating Capability) of the executed, or requested to be filed unexecuted Interconnection Service Agreement.

### 36.1.1B Surplus Interconnection Service Request

Requests for Surplus Interconnection Service may be made by the existing Interconnection Customer whose Generating Facility is already interconnected, or one of its affiliates, or by an unaffiliated Interconnection Customer. The existing Interconnection Customer or one of its affiliates has priority to use this service; however, if they do not exercise this priority, Surplus Interconnection Requests also may be made available to an unaffiliated Surplus Interconnection Customer. Surplus Interconnection Service is limited to utilizing or transferring an existing Generating Facility's Surplus Interconnection Service at the pre-existing Point of Interconnection of the existing Generating Facility and cannot exceed the existing Generating Facility's total amount of Interconnection Service, i.e., the total amount of Interconnection Service used by the Generating Facility requesting Surplus Interconnection Service and the existing Generating Facility shall not exceed the lesser of the Maximum Facility Output stated in the existing Generating Facility's Interconnection Service Agreement or the total "as-built capability" of the existing Generating Facility. If the Generating Facility requests Surplus Interconnection Service associated with an existing Generating Facility that is an Energy Resource, the Generating Facility requesting the Surplus Interconnection Service shall be an Energy Resource; and if the existing Generating Facility is a Capacity Resource, the Generating Facility requesting Surplus Interconnection Service associated with the Generating Facility may be an Energy Resource or a Capacity Resource (but only up to the amount of Capacity Interconnection Rights granted the existing Generating Facility). Surplus Interconnection Service cannot be granted if doing so would require new Network Upgrades or would have additional impacts affecting the determination of what Network Upgrades would be necessary to New Service Customers already in the New Services Queue or that have a material impact on short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response.

1. Surplus Interconnection Request Requirements. A Surplus Interconnection Customer seeking Surplus Interconnection Service must submit a complete and fully executed Surplus Interconnection Study Agreement, which form is located at Tariff, Attachment RR. To be considered complete at the time of submission, the Surplus Interconnection Customer's Surplus Interconnection Study Agreement must include, at a minimum, each of the following:

    a. Specification of the location of the proposed surplus generating unit site or existing surplus generating unit (include both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the generating unit site); and

    b. Evidence of an ownership interest in, or right to acquire or control the surplus generating unit site for a minimum of three years, such as a deed, option agreement, lease or other similar document acceptable to the Transmission Provider; and

c. The MW size of the proposed surplus generating unit or the amount of increase in MW capability of an existing surplus generating unit; and Identification of the fuel type of the proposed surplus generating unit or upgrade thereto; and

d. Identification of the fuel type of the proposed surplus generating unit or upgrade thereto; and

e. A description of the equipment configuration, and a set of preliminary electrical design specifications, and, if the surplus generating unit is wind generation facility, then the set of preliminary electrical design specifications must depict the wind plant as a single equivalent generator; and

f. The planned date the proposed surplus generating unit or increase in MW capability of an existing surplus generating unit will be in service; and

g. Any additional information as may be prescribed by the Transmission Provider in the PJM Manuals; and

h. A description of the circumstances under which Surplus Interconnection Service will be available at the existing Generating Facility's Point of Interconnection; and

i. A deposit in the amount of $10,000 plus $100 for each MW requested provided that the maximum total deposit amount for a Surplus Interconnection Request shall not exceed $110,000. If any deposit monies remain after the Surplus Interconnection Study is complete and any outstanding monies owed by the Surplus Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Surplus Interconnection Requests by the Surplus Interconnection Customer have been paid, such remaining deposit monies shall be returned to the Surplus Interconnection Customer; and

j. Identification of the specific, existing Generating Facility already interconnected to the PJM Transmission System providing Surplus Interconnection Service, including whether the Surplus Interconnection Customer requesting Surplus Interconnection Service is the owner or affiliate of the existing Generating Facility; and

k. If the Surplus Interconnection Customer is an unaffiliated third party, the Surplus Interconnection Customer must submit with its Surplus Interconnection Study Agreement the following information and documentation acceptable to the Transmission Provider:

i. Written evidence from the owner of the existing Generating Facility granting Surplus Interconnection Customer permission to utilize the existing Generating Facility's unused portion of Interconnection Service established in the existing Generating Facility's Interconnection Service Agreement; and

ii. Written documentation stating that the owner of the surplus generating unit and the owner of the existing Generating Facility will have entered into, prior to the owner of the existing Generating Facility executing a revised Interconnection Service Agreement, a shared facilities agreement between the owner of the existing Generating Facility and the owner of the surplus generating unit detailing their respective roles and responsibilities relative to the Surplus Interconnection Service.

l. If an Energy Storage Resource, Surplus Interconnection Customer must submit primary frequency response operating range for the surplus generating unit.

2. Deficiency Review. Following the receipt of the Surplus Interconnection Study Agreement and requisite information and/or monies listed in section 36.1.1B.1.a – l above, Transmission Provider shall determine whether the listed requirements were submitted as valid or deficient. If deemed deficient by Transmission Provider, Surplus Interconnection Customer must submit the requisite information and/or monies acceptable to the Transmission Provider within ten Business Days of receipt of the Transmission Provider's notice of deficiency. Failure of the Interconnection Customer to timely provide information and/or monies identified in the deficiency notice shall result in the Surplus Interconnection Request being terminated and withdrawn. The Surplus Interconnection Service Request shall be considered valid as of the date and time the Transmission Provider receives from the Interconnection Customer the last piece of required information and/or monies deemed acceptable by the Transmission Provider to clear such deficiency notice.

**36.1.2 No Applicability to Transmission Service:**

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

**36.1.3 [Reserved]**

**36.1.4 [Reserved]**

**36.1.5 Scoping Meeting:**

After a valid Interconnection Request has been established, the 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 establishing a valid Interconnection Request, Transmission Provider shall offer to arrange, within seven Business Days of establishing such valid Interconnection Request, 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 establishment of a valid Interconnection Request if the valid Interconnection Request is established in the first four calendar months of the current New Services Queue; or within 30 days if the valid Interconnection Request is established within the fifth calendar month of the current New Services Queue; or in 20 days if the valid Interconnection Request is established in the sixth 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 Tariff, Part VI, Subpart A, section 202.

**36.1.7 Base Case Data:**

Transmission Provider shall maintain base case power flow, short circuit and stability databases, including all underlying assumptions, and contingency list on a password-protected website, subject to the confidentiality provisions of Tariff, Part VI, Subpart B, section 223. In addition, Transmission Provider shall maintain base case power flows and underlying assumptions on a password-protected website. Such base case power flows and underlying assumptions should reasonably represent those used during the most recent interconnection study. Transmission Provider may require Interconnection Customers and password-protected website users to sign any required confidentiality agreement(s) before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects, that are 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 Tariff, Part IV, Subpart A, section 36.1, 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 Tariff, Part IV and Tariff, 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 electsto 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 Tariff, 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 Tariff, Part IV, Subpart A, section 36.1.01, Tariff, Part IV, Subpart A, section 36.1.03, Tariff, Part IV, Subpart G, section 110.1, Tariff, Part IV, Subpart G, section 111.1, and Tariff, Part IV, Subpart G, section 112.1 from the Interconnection Customer, and, if applicable, subject to the terms of Tariff, Part IV, Subpart A, 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 Tariff, Part VI, Subpart B, section 217. 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. Transmission Provider shall study the Interconnection Request at the level of service requested by the Interconnection Customer, unless otherwise required to study the full electrical generating capability of the Generating Facility due to safety or reliability concerns. For purposes of determining necessary interconnection facilities and network upgrades, the Feasibility Study shall consider the level of Interconnection Service requested by the Interconnection Customer, unless otherwise required to study the full electrical generating capability of the Generating Facility due to safety or reliability concerns. 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 Operating Agreement, section 18.17, 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 website. 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 two times each year.

The following applies to Interconnection Requests received on or before October 31, 2016:

For Interconnection Requests received during the six-month period ending October 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by

the last day of February. For Interconnection Requests received during the six-month period ending April 30 the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by August 31. Following the closure of an interconnection queue on October 31 and April 30, the Transmission Provider will utilize the following one month period to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on December 1 and June 1, respectively. 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.

The following applies to Interconnection Requests received between November 1, 2016 and March 31, 2017:

For Interconnection Requests received during the five-month period ending March 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by July 31. Following the closure of the relevant New Services Queue on March 31, the Transmission Provider will utilize the following one month period to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on May 1. 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.

The following applies to Interconnection Requests received on or after April 1, 2017:

For Interconnection Requests received during the six-month period ending September 30, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by January 31. For Interconnection Requests received during the six-month period ending March 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by July 31. Following the closure of the relevant New Services Queues on September 30 and March 31, respectively, the Transmission Provider will utilize the following months of October and April, respectively, to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on November 1 and May 1, respectively. 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 [Reserved]**

**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, configuration or technology to differ from any corresponding information provided in the Interconnection Request. The Interconnection Customer shall retain its Queue Position if the modification is in accordance with Tariff, Part IV, Subpart A, sections 36.2A.1, 36.2A.3 or 36.2A.6, or, if not in accordance with one of those sections, is determined not to be a Material Modification pursuant to Tariff, Part IV, Subpart A, section 36.2A.4 below. 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 Tariff, Part VI, Subpart A, section 205.5 and/or Tariff, Part VI, Subpart A, section 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.

The following language for 36.2A.1 and 36.2A.3 apply to Interconnection Requests which have entered the New Services Queue prior to May 1, 2012:

> 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.

The following language for 36.2A.1 and 36.2A.3 apply to Interconnection Requests which have entered the New Services Queue on or after May 1, 2012:

**36.2A.1 Modifications Prior to Executing A System Impact Study Agreement**

36.2A.1.1 Prior to the commencement of the Feasibility Study, an Interconnection Customer may request to reduce by up to 60 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A or the capability (in the case of a Transmission Interconnection Request) without losing its current Queue Position. For Interconnection Requests received in months one through five of the New Services Queue the Interconnection Customer must identify this change prior to the close of business on the last day of the sixth month of the New Services Queue. For Interconnection Requests received during the sixth month of the New Services Queue the Interconnection Customer must identify this change no later than close of business on the day following the completion of the scoping meeting.

36.2A.1.2 After the start of the Feasibility Study, but prior to the return of the executed System Impact Study Agreement to the Transmission Provider, an Interconnection Customer may modify its project to reduce the size of the project as provided in this section 36.2A.1.2, subject to the limitation described in Tariff, Part IV, Subpart A, section 36.2A.7 below. The Interconnection Customer may reduce its project by up to 15 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A or capability (in the case of a Transmission Interconnection Request) of the proposed project. For a request to reduce by more than 15 percent, an Interconnection Customer must request the Transmission Provider to evaluate if such a change would be a Material Modification and the Transmission Provider will allow the Interconnection Customer to reduce the size of its project: (i) to any size if the Transmission Provider determines the change is not a Material Modification; or (ii) by up to 60 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A) or capability (in the case of a Transmission Interconnection Request) if the Transmission Provider determines the change is a Material Modification, however, such a project that falls within this subsection (ii) would be removed from its current Queue Position and will be assigned a new Queue Position at the beginning of the subsequent queue and a new Interconnection Feasibility Study will be performed consistent with the timing of studies for projects submitted in the subsequent queue. All projects assigned such new Queue Positions will retain their priority with respect to each other in their newly assigned queue and with respect to all later queue projects in subsequent queues, but will lose their priority with respect to other projects in the queue to which they were previously assigned. 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 Modification of an Interconnection Request for Technological Changes

36.2A.2.1 For a request to modify a project to include a technological advancement, no later than the return of the executed Facilities Study Agreement (or, if a Facilities Study is not required, prior the return of an executed Interconnection Service Agreement) to the Transmission Provider, an Interconnection Customer may request to modify its Interconnection Request to include a Permissible Technological Advancement without losing its current Queue Position provided Interconnection Customer submits the new machine modeling data associated with such Permissible Technological Advancements no later than the return of the executed Facilities Study Agreement (or, if a Facilities Study is not required, prior to return of an executed Interconnection Service Agreement). The machine modeling data as specified in the PJM Manuals associated with the requested technological change must be submitted via the PJM website.

36.2A.2.2 For a request to modify an Interconnection Request to include a technological advancement that does not qualify as a Permissible Technological Advancement, prior to returning an executed Facilities Study Agreement (or, if a Facilities Study is not required, prior to returning an executed Interconnection Service Agreement) to the Transmission Provider, an Interconnection Customer may request in writing to modify its Interconnection Request to add a technological advancement. Such requests must also include machine modeling data as specified in the PJM Manuals and submitted via the PJM website. If PJM determines the data submitted with such request is incomplete or incorrect, PJM will reject such technological change request and the Interconnection Customer may resubmit its technological change request with the complete and/or accurate data. All technological advancement requests not qualifying as a Permissible Technological Advancement will require a study and be evaluated by the Transmission Provider to determine whether such change would constitute a Material Modification. Such evaluation will include an analysis of the short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response on subsequent-queued Interconnection Requests. If the Transmission Provider determines that the technological advancement is not a Material Modification, the Interconnection Customer may modify its Interconnection Request to include such technological advancement. If the Transmission Provider determines the change is a Material Modification, the Interconnection Customer must withdraw its technological advancement change request to retain its Queue Position or proceed with a new Interconnection Request with such technological change. PJM shall determine whether a technological advancement is a Material Modification within thirty (30) calendar days of receipt of the technological advancement request.

### 36.2A.3 Modifications After the System Impact Study Agreement but Prior to Executing an Interconnection Service Agreement

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 size of the project as provided in this section 36.2A.3, subject to the limitation described in Tariff, Part IV, Subpart A, section 36.2A.7 below. The Interconnection Customer may reduce its project by the greater of 10 MW or 5 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service

level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A) or capability (in the case of a Transmission Interconnection Request) of the proposed project. For a request to reduce by more than the greater of 10 MW or 5 percent, an Interconnection Customer must request the Transmission Provider to evaluate if such a change would be a Material Modification and the Transmission Provider will allow the Interconnection Customer to reduce the size of its project: (i) to any size if the Transmission Provider determines the change is not a Material Modification; or (ii) by up to the greater of 50 MW or 20 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A)or capability (in the case of a Transmission Interconnection Request) if the Transmission Provider determines the change is a Material Modification, however, such a project that falls within this subsection (ii) would be removed from its current Queue Position and will be assigned a new Queue Position at the beginning of the subsequent queue and a new System Impact Study will be performed consistent with the timing of studies for projects submitted in the subsequent queue. All projects assigned such new Queue Positions will retain their priority with respect to each other in their newly assigned queue and with respect to all later queue projects in subsequent queues, but will lose their priority with respect to other projects in the queue to which they were previously assigned.

**36.2A.4**

Prior to making any modifications other than those specifically permitted by Tariff, Part IV, Subpart A, sections 36.2A.1, 36.2A.3 and 36.2A.6, 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.4, any change to the Point of Interconnection (other than a change deemed acceptable under Tariff, Part IV, Subpart A, 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.5**

Upon receipt of the Interconnection Customer's request for modification under Tariff, Part IV, Subpart A section 36.2A.4, 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 shall not require a separate deposit for any additional studies required as a result of Interconnection Customer's request for modification under Tariff, Part IV, Subpart A, section 36.2A.4 above. Instead, all such study costs shall be invoiced and paid as

work to be conducted under the Feasibility Study, System Impact Study, or Facilities Study, as applicable.

**36.2A.6**

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.

The proposed Commencement Date can be extended (i) after the scoping meeting, once study timing is fully understood, not to exceed seven (7) years; (ii) due to study delays; or (iii) due to associated Network Upgrade construction timing.

The following language applies to Interconnection Requests which have entered the New Services Queue on or after May 1, 2012.

**36.2A.7**

An Interconnection Customer may be assigned a new queue position as provided for in Tariff, Part IV, Subpart A, sections 36.2A.1.2 or 36.2A.3 a total of two times for any single Interconnection Request. In the event that Interconnection Customer seeks to reduce the size of its project such that Transmission Provider determines the change is a material modification, and such change would result in the third assignment of a new queue position under Tariff, Part IV, Subpart A, sections 36.2A.1 .2 or 36.2A.3, then the Interconnection Request shall be terminated and withdrawn if the Interconnection Customer proceeds with such change.

**36.3 Upgrade Feasibility Study:**

After receiving a signed Upgrade Request, pursuant to Attachment EE of the PJM Tariff, seeking Incremental Auction Revenue Rights and the applicable deposit of $20,000, the Transmission Provider shall conduct an Upgrade Feasibility Study to make a preliminary determination of the type and scope of any Local Upgrades or Network Upgrades that will be necessary to accommodate the Upgrade Request and provide the Upgrade Customer a preliminary estimate of the time that will be required to construct any necessary facilities and upgrades and the Upgrade Customer's cost responsibility, estimated consistent with Tariff, Part VI, Subpart B, section 217 . The Upgrade Feasibility Study assesses the practicality and cost of accommodating the requested service. The analysis is limited to load-flow analysis of probable contingencies. The Transmission Provider shall provide a copy of the Upgrade 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 Upgrade Customer and the affected Transmission Owner(s). Upon completion, the Transmission Provider shall make the completed Upgrade Feasibility Study publicly available. The Transmission Provider shall conduct Upgrade Feasibility Studies two times each year in conjunction with the Interconnection Feasibility Studies conducted under Tariff, Part IV, Subpart A, section 36.2.

## 36.4 Surplus Interconnection Study

After receiving a valid Surplus Interconnection Study Agreement seeking Surplus Interconnection Service and the requisite deposit set forth in Tariff, Part IV, Subpart A, section 36.1.1B.1.i from the Surplus Interconnection Customer, the Transmission Provider shall conduct a Surplus Interconnection Study.

(1) Scope of Surplus Interconnection Study. A Surplus Interconnection Study shall consist of reactive power, short circuit/fault duty, stability analysis and any other appropriate analyses. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied under off-peak conditions. Off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection Service. The Transmission Provider shall use Reasonable Efforts to complete the Surplus Interconnection Study within one hundred eighty (180) days of determination of a valid Surplus Interconnection Service Request pursuant to Tariff, Part IV, Subpart A, section 36.1.1B. If the Transmission Provider is unable to complete the Surplus Interconnection Study within such time period, Transmission Provider shall notify the Surplus Interconnection Customer and provide an estimated completion date and an explanation of the reasons why the additional time is required.

(2) Once the Surplus Interconnection Study is completed and Transmission Provider confirms that (i) no new Network Upgrades are required, (ii) there are no impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, and (iii) there are no material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and response, the Transmission Provider shall issue the Surplus Interconnection Study to the Surplus Interconnection Customer. If the Surplus Interconnection Customer is an unaffiliated third party, PJM shall issue a Surplus Interconnection Study to the owner of the existing Generating Facility. A revised Interconnection Service Agreement will be prepared and issued to the owner of the existing Generating Facility within sixty (60) days of issuance of the Surplus Interconnection Study including the terms and conditions for Surplus Interconnection Service. Within sixty (60) days of receipt by the owner of the existing Generating Facility of the revised Interconnection Service Agreement, the owner of the existing Generating Facility will execute the revised Interconnection Service Agreement, request dispute resolution or request that the Interconnection Service Agreement be filed unexecuted in accordance with Tariff, Part VI, Subpart A, section 212.4.

(3) If the Transmission Provider determines from the Surplus Interconnection Study that Network Upgrades may be required or there may be impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, or there may be material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and

response, the Surplus Interconnection Request will be terminated and withdrawn upon issuance of the Surplus Interconnection Study.

(4) Deactivation of Existing Generating Facility

a. Surplus Interconnection Service cannot be offered if the existing Generating Facility from which Surplus Interconnection is provided is deactivated or has submitted a Notice to Deactivate to Transmission Provider consistent with Tariff, Part V, before the surplus generating unit has commenced commercial operation.

b. Limited Operation. A Generating Facility receiving Surplus Interconnection Service may continue to receive Surplus Interconnection Service for a period not to exceed one (1) year after the existing Generating Facility's Deactivation Date under the following conditions:

i. The surplus generating unit must have been studied by the Transmission Provider for the sole operation at the Point of Interconnection; and

ii. The owner of the existing Generating Facility must agree in writing that the Surplus Interconnection Customer may continue to operate at either its limited share of the existing Generating Facility's capability under its Interconnection Service Agreement or any level below such capability upon the deactivation of the existing Generating Facility.

c. If the Surplus Interconnection Customer cannot satisfy the conditions of Tariff, Part IV, Subpart A, section 36.4.4(b) above, the revised Interconnection Service Agreement for the existing Generating Facility shall terminate consistent with the Interconnection Service Agreement terms of termination for a deactivated Generating Facility.

## 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 Tariff, 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 Tariff, Part IV or Tariff, Part VI, Transmission Provider shall not be required to provide Interconnection Service to Interconnection Customer pursuant to Tariff, Part IV or Tariff, 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 Tariff, Part I, section 5.2(ii).

## 40 Non-Binding Dispute Resolution Procedures:

If a party has submitted a notice of dispute pursuant to Tariff, Part I, section 12.1 and the parties are unable to resolve the dispute through unassisted or assisted negotiation within the thirty (30) days (or such other period as the parties to the dispute may agree upon) provided in that section, and the parties cannot reach mutual agreement to pursue Tariff, Part I, section 12.2 arbitration process, a party may request that Transmission Provider engage in non-binding dispute resolution pursuant to this section 40 by providing written notice to Transmission Provider. Conversely, either party may file a request for non-binding dispute resolution pursuant to this section without first seeking mutual agreement to pursue Tariff, Part I, section 12.2 arbitration process. The process in this section shall serve as an alternative to, and not a replacement of, the Tariff, Part I, section 12.2 arbitration process. Pursuant to this process, a Transmission Provider must within thirty (30) days of receipt of the request for this non-binding dispute resolution appoint a neutral decision-maker that is an independent subcontractor that shall not have any current or past substantial business or financial relationships with either party. Unless otherwise agreed to by the parties, the decision-maker shall render a decision within sixty (60) days of appointment and shall notify the parties in writing of such decision and reasons therefore. This decision-maker shall be authorized only to interpret and apply the provisions of the Tariff and relevant service agreement and shall have no power to modify or change any provision of the Tariff or relevant service agreement in any manner. The result reached in this process is not binding, but, unless otherwise agreed, the parties may cite the record and decision in the non-binding dispute resolution process in future dispute resolution processes, including in a Tariff, Part I, section 12.2 arbitration, or in a Federal Power Act, section 206 complaint. Each party shall be responsible for its own costs incurred during the process and the cost of the decision-maker shall be divided equally among each party to the dispute.

## 41 Interconnection Study Statistics

Transmission Provider will maintain on its website summary statistics related to processing Interconnection Studies pursuant to Interconnection Requests, which will be updated every six months. For purposes of this section, an Interconnection Study is deemed complete on the date upon which the study itself is completed and a study report is provided to the Interconnection Customer and Interconnected Transmission Owner(s). For each six-month reporting period, Transmission Provider will calculate and post the information detailed in Tariff, Part IV, Subpart A, sections 41.1 through 41.4.

**41.1 Interconnection Feasibility Studies Processing Time:**

(a) Number of Interconnection Requests that had Interconnection Feasibility Studies completed within Transmission Provider's coordinated region during the six-month reporting period.

(b) Number of Interconnection Requests that had Interconnection Feasibility Studies completed within Transmission Provider's coordinated region during the six-month reporting period that were completed after the Interconnection Feasibility Study deadline specified in Tariff, Part IV, Subpart A, section 36.2.

(c) At the end of the six month reporting period, the number of active valid Interconnection Requests with ongoing incomplete Interconnection Feasibility Studies where such Interconnection Requests had exceeded the Interconnection Feasibility Study deadline in Tariff, Part IV, Subpart A, section 36.2 before the end of the six month reporting period.

(d) Mean time (in days), Interconnection Feasibility Studies completed within Transmission Provider's coordinated region during the six month reporting period, from the date when Transmission Provider initiated performance of the Interconnection Feasibility Studies to date when Transmission Provider provided the completed Interconnection Feasibility Study to the Interconnection Customer.

(e) Percentage of Interconnection Feasibility Studies exceeding the Interconnection Feasibility Study deadline in Tariff, Part IV, Subpart A, section 36.2 to complete this six-month reporting period, calculated as the sum of Tariff, Part IV, Subpart A, section 41.1(b) plus Tariff, Part IV, Subpart A, section 41.1(c) divided by the sum of Tariff, Part IV, Subpart A, section 41.1(a) plus Tariff, Part IV, Subpart A, section 41.1(c).

**41.2 Interconnection System Impact Studies Processing Time:**

(a) Number of Interconnection Requests that had Interconnection System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period.

(b) Number of Interconnection Requests that had Interconnection System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period that were completed after the deadline specified in the System Impact Study Agreement.

(c) At the end of the six-month reporting period, the number of active valid Interconnection Requests with ongoing incomplete System Impact Studies where such Interconnection Requests had exceeded the deadline specified in the System Impact Study Agreement before the end of the six-month reporting period.

(d) Mean time (in days), Interconnection System Impact Studies completed within Transmission Provider's coordinated region during the six-month reporting period, from the date when Transmission Provider initiated the performance of the System Impact Studies to the date when Transmission Provider provided the completed Interconnection System Impact Study to the Interconnection Customer.

(e) Percentage of Interconnection System Impact Studies exceeding deadline specified in the System Impact Study Agreement to complete this six-month reporting period, calculated as the sum of Tariff, Part IV, Subpart A, section 41.2(b) plus Tariff, Part IV, Subpart A, section 41.2(c) divided by the sum of Tariff, Part IV, Subpart A, section 41.2(a) plus Tariff, Part IV, Subpart A, section 41.2(c).

**41.3 Interconnection Facilities Studies Processing Time:**

(a) Number of Interconnection Requests that had Interconnection Facilities Studies completed within Transmission Provider's coordinated region during the six-month reporting period.

(b) Number of Interconnection Requests that had Interconnection Facilities Studies that are completed within Transmission Provider's coordinated region during the six-month reporting period that were completed after the deadline specified in the Facilities Study Agreement.

(c) At the end of the six-month reporting period, the number of active valid Interconnection Service requests with ongoing incomplete Interconnection Facilities Studies where such Interconnection Requests had exceeded the deadline specified in the Facilities Study Agreement before the end of the six-month reporting period.

(d) Mean time (in days), Interconnection Facilities Studies completed within Transmission Provider's coordinated region during the six-month reporting period, calculated from the date when Transmission Provider received the executed Interconnection Facilities Studies Agreement to the date when Transmission Provider provided the completed Interconnection Facilities Study to the Interconnection Customer.

(e) Percentage of delayed Interconnection Facilities Studies this six-month reporting period, calculated as the sum of Tariff, Part IV, Subpart A, section 41.3(b) plus Tariff, Part IV, Subpart A, section 41.3(c) divided by the sum of Tariff, Part IV, Subpart A, section 41.3(a) plus Tariff, Part IV, Subpart A, section 41.3(c).

**41.4 Interconnection Service Requests Withdrawn from Interconnection Queue:**

(a) Number of valid Interconnection Requests that withdrew from Transmission Provider's interconnection queue during the six-month reporting period [this eliminates all new Interconnection Requests that were found to be invalid] [this total number].

(b) Number of valid Interconnection Requests withdrawn from Transmission Provider's interconnection queue during the six-month reporting period before completion of any interconnection studies or execution of any interconnection study agreements.

(c) Number of Interconnection Requests withdrawn from Transmission Provider's interconnection queue during the six-month reporting period before completion of an Interconnection System Impact Study.

(d) Number of Interconnection Requests withdrawn from Transmission Provider's interconnection queue during the six-month reporting period before completion of an Interconnection Facility Study.

(e) Number of New Service Requests withdrawn from Transmission Provider's interconnection queue during the six-month reporting period after execution of an Interconnection Service Agreement, Upgrade Construction Service Agreement or Wholesale Market Participation Agreement or Interconnection Customer requests the filing of an unexecuted, new Interconnection Service Agreement.

(f) Mean time (in days), for all withdrawn Interconnection Requests, from the date when the Interconnection Request was determined to be valid to when Transmission Provider received the request to withdraw from the queue.

### 41.5 Posting Requirements

Transmission Provider is required to post on its website the measures in Tariff, Part IV, Subpart A, sections 41.1 through 41.4 for each six-month reporting period within thirty (30) days of the end of the reporting period. Transmission Provider will keep the measures posted on its website for three (3) calendar years with the first required reporting year to be 2020.

## 41.6 Additional Compliance Requirements

In the event that any of the values calculated in Tariff, Part IV, Subpart A, section 41.1(e), Tariff, Part IV, Subpart A, section 41.2(e) or Tariff, Part IV, Subpart A, section 41.3(e) exceeds 25 percent for two consecutive reporting periods, Transmission Provider will have to comply with the measures below for the next two (2) six-month reporting periods and must continue reporting this information until Transmission Provider reports two (2) consecutive six-month reporting periods without the values calculated in Tariff, Part IV, Subpart A, section 41.1(e), Tariff, Part IV, Subpart A, section 41.2(e) or Tariff, Part IV, Subpart A, section 41.3(e) exceeding 25 percent for two (2) consecutive six-month reporting periods:

(a) Transmission Provider must submit a report to the Commission describing the reason for each study or group of clustered studies pursuant to an Interconnection Request that exceeded its deadline (i.e., 45, 90 or 180 days) for completion (excluding any allowance for Reasonable Efforts). Transmission Provider must describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The report must be filed at the Commission within 45 days of the end of the reporting period.

(b) Transmission Provider shall aggregate the total number of employee hours and third party consultant hours expended towards interconnection studies within its coordinated region that reporting period and post on its website. This information is to be posted within thirty (30) days of the end of the reporting period.

**42 – 108 [Reserved.]**

## Subpart B – [Reserved.]

## Subpart C – [Reserved.]

## Subpart D – [Reserved.]

## Subpart E – [Reserved.]

## Subpart F – [Reserved.]

## Subpart G – SMALL GENERATION INTERCONNECTION PROCEDURE

References to section numbers in this Subpart G refer to sections of this Subpart G, unless otherwise specified.

### Preamble

Requests for the interconnection of new Small Generation Resources 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(synchronous) or greater than 5 MW (inverter-based), temporary Energy Resource additions of 20 MW or less but greater than 2 MW (synchronous) or 5 MW (inverter-based), permanent and temporary Energy Resource additions of 2 MW or less (synchronous) or 5 MW or less (inverter-based), and certified small inverter-based facility additions no larger than 10 kW. Tariff, Part VI 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 Tariff, Part IV, Subpart G.

Interconnection Requests submitted pursuant to this Subpart G shall be evaluated using the maximum capacity that the Small Generation Resource is capable of injecting into the Transmission Provider's electric system. However, if the maximum capacity that the Small Generation Resource is capable of injecting into the Transmission Provider's electric system is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the Transmission Provider's agreement, with such agreement not to be unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not adversely affect the safety and reliability of the Transmission Provider's system. If the Transmission Provider does not so agree, then the Interconnection Request must be withdrawn or revised to specify the maximum capacity that the Small Generation Resource is capable of injecting into the Transmission Provider's electricy system without such limitations. Furthermore, nothing in the foregoing shall prevent a Transmission Provider from considering an output higher than the limited output, if appropriate, when evaluating system protection impacts.

## 109 Pre-application Process

### 109.1 Eligibility

A pre-application report request submitted pursuant to this section will only be furnished to prospective Interconnection Customers seeking to interconnect Small Generation Resources or increases of 20 MW or less to the capability of existing generation resources which, when combined, does not exceed 20 MW in aggregated maximum facility output

### 109.2 Informal Request

The Transmission Provider shall designate an employee or office from which information on the pre-application process and on the Transmission Provider's system can be obtained through informal requests from a prospective Interconnection Customer presenting a proposed project for a specific site. The name, telephone number and e-mail address of such contact employee or office shall be made available on the Transmission Provider's Internet web site. Electric system information provided to the prospective Interconnection Customer should include relevant system studies, interconnection studies, and other materials useful to provide an understanding of an interconnection at a particular point on the Transmission Provider's system, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. The Transmission Provider shall comply with reasonable requests for such information.

### 109.3 Pre-application Request

In addition to the information described in section 109.2, which may be provided in response to an informal request, a prospective Interconnection Customer may submit a formal written request form, which form shall be made available on the Transmission Provider's Internet web site, requesting a pre-application report on a proposed project at a specific site. The written pre-application report request from shall include the information in sections 109.3.1 through 109.3.8 below to clearly and sufficiently identify the location of the proposed Point of Interconnection.

109.3.1 Project contact information, including name, address, phone number and email address.

109.3.2 Project location (street address with nearby cross streets and town).

109.3.3 Meter number, pole number, or other equivalent information identifying proposed Point of Interconnection, if available.

109.3.4 Generator type (e.g., solar, wind, combined heat and power, etc.).

109.3.5 Size (alternating current kW).

109.3.6 Single or three phase generator configuration.

109.3.7 Stand-alone generator (no onsite load, not including station service – Yes or No?).

109.3.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify if the load is expected to change.

**109.4 Jurisdictional Review**

Within five (5) Business Days following the receipt of a completed formal written request, submitted along with a $300 deposit paid by the prospective Interconnection Customer, the Transmission Provider will evaluate whether the proposed project contemplates FERC-jurisdictional service and/or will be interconnected with FERC-jurisdictional facilities. If it is determined that the proposed project does not contemplate FERC-jurisdictional service and/or will not be interconnecting with FERC-jurisdictional facilities, the Transmission Provider will so inform the prospective Interconnection Customer and refund the $300 deposit.

**109.5 Pre-application Report**

After the Transmission Provider has determined that a proposed project contemplates FERC-jurisdictional service and/or will be interconnected with FERC-jurisdictional facilities, the prospective Interconnection Customer's $300 deposit paid in conjunction with the jurisdictional review noted above, will be utilized to satisfy a $300 non-refundable fee required for the Transmission Provider to process a pre-application report. The Transmission Provider shall provide the pre-application data described in section 109.6 below to the Interconnection Customer within 20 Business Days after the completion of the jurisdictional review set forth above. The pre-application report produced by the Transmission Provider is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to the Transmission Provider's system.

**109.6 Pre-application Report Data**

Using the information provided in the pre-application report request form in section 109.3, the Transmission Provider will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Interconnection. This selection by the Transmission Provider does not necessarily indicate after application of the screens and/or study that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional pre-application reports if information about multiple Points of Interconnection is requested. Subject to section 109.7, the pre-application report will include the following information:

109.6.1 Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.

109.6.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.

109.6.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.

109.6.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).

109.6.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

109.6.6 Nominal distribution circuit voltage at the proposed Point of Interconnection.

109.6.7 Approximate circuit distance between the proposed Point of Interconnection and the substation.

109.6.8 Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in section 112A.5.3.1 below and absolute minimum load, when available.

109.6.9 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area. Identify whether the substation has a load tap changer.

109.6.10 Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.

109.6.11 Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.

109.6.12 Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.

109.6.13 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

**109.7 Pre-application Report Limitations**

The pre-application report need only include existing data. A pre-application report request does not obligate the Transmission Provider to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the Transmission Provider cannot complete all or some of a pre-application report due to lack of available data, the Transmission Provider shall provide the Interconnection Customer with a pre-application report that includes that data that is available. The provision of information on "available capacity" pursuant to Tariff, Part IV, Subpart G, section 109.6.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process, and data provided in the pre-application report may become outdated at the time of the submission of the complete Interconnection Request. Notwithstanding any of the provisions

of this section, the Transmission Provider shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.

## 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) Small Generation Resources, 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

A 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 to the Transmission Provider a Generation Interconnection Request. The Transmission Provider shall acknowledge receipt of the Generation Interconnection Request (electronically when available to all parties, otherwise written) within five Business Days after receipt of the Generation Interconnection Request.

1. Generation Interconnection Request Requirements.

   a. To be assigned a PJM Queue Position pursuant to Tariff, Part VI, Preamble, section 201, a Generation Interconnection Customer must submit a complete and fully executed Generation Interconnection Feasibility Study Agreement, a form of which is located in the Tariff, Attachment N. To be considered complete at the time of submission, the Interconnection Customer's Generation Interconnection Feasibility Study Agreement must include, at a minimum, each of the following:

      i. specification of the location of the proposed generating unit site or existing generating unit (include both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the generating unit site); and

      ii. evidence of an ownership interest in, or right to acquire or control the generating unit site for a minimum of two years, such as a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider; and

      iii. the MW size of the proposed generating unit or the amount of increase in MW capability of an existing generating unit, and identification of any MW portion of the facility's capability that will be a Capacity Resource; and

      iv. identification of the fuel type of the proposed generating unit or upgrade thereto; and

      v. a description of the equipment configuration, and a set of preliminary electrical design specifications, and, if the generating unit is a wind generation facility, then the set of preliminary electrical design specifications must depict the wind plant as a single equivalent generator; and

      vi. the planned date the proposed generating unit or increase in MW capability of an existing generating unit will be in service, where such date is to be no more than seven years from the date that a

complete and fully executed Generation Interconnection Feasibility Study Agreement is received by the Transmission Provider unless the Interconnection Customer demonstrates that engineering, permitting, and construction of the generating unit or increase in capability will take more than seven years; and

vii. any additional information as may be prescribed by the Transmission Provider in the PJM Manuals; and

viii. If Behind the Meter Generation is identified in the Generation Interconnection Feasibility Study Agreement, all of the requirements in Tariff, Part IV, Subpart A, section 36.1A must also be met; and

ix. Deposit.

(1) A deposit shall be submitted to Transmission Provider, as follows:

(a) A deposit of $10,000 if the Generation Interconnection Request is received in the first four calendar months of the current New Services Queue; or

(b) A deposit of $12,000 if the Generation Interconnection Request is received in the fifth calendar month of the current New Services Queue; or

(c) A deposit of $15,000 if the Generation Interconnection Request is received in the sixth calendar month of the current New Services Queue.

(2) 10% of each total deposit amount is non-refundable. Any unused non-refundable deposit monies shall be returned to the Generation Interconnection Customer upon Initial Operation. However, if, before reaching Initial Operation, the Generation Interconnection Customer withdraws its Generation Interconnection Request, or the Generation Interconnection Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:

(a) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any

failure of the Interconnection Customer to pay actual costs for the Generation Interconnection Request and/or associated Queue Position; and/or

(b) Any restudies required as a result of the rejection, termination and/or withdrawal of such Generation Interconnection Request; and/or

(c) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer.

(3) 90% of each total deposit amount is refundable, and the Transmission Provider shall utilize, in no particular order, the refundable portion of each total deposit amount to cover the following:

(a) The cost of the Queue Position acceptance review; and

(b) The cost of the deficiency review of the Interconnection Customer's Generation Interconnection Request (to determine whether the Generation Interconnection Request is valid); and

(c) The dollar amount of the Interconnection Customer's cost responsibility for the Generation Interconnection Feasibility Study; and

(d) If the Generation Interconnection Request is deemed to be modified (pursuant to Tariff, Part IV, Subpart A, section 36.2A), rejected, terminated and/or withdrawn during the deficiency review and/or deficiency response period, as described further below, or during the Feasibility Study period, the refundable deposit money shall be applied to cover all of the costs incurred by the Transmission Provider up to the point of such Generation Interconnection Request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:

(i) The costs of any restudies required as a result of the modification (pursuant to Tariff, Part IV, Subpart A, section 36.2A),

rejection, termination and/or withdrawal of such Generation Interconnection Request; and/or

(ii) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Generation Interconnection Request and/or associated Queue Position; and/or

(iii) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer.

(iv) If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to the Generation Interconnection Customer in accordance with the PJM Manuals.

(4) Upon completion of the Feasibility Study, the Transmission Provider shall apply any remaining refundable deposit monies toward:

(a) The Interconnection Customer's cost responsibility for any other studies conducted for the Generation Interconnection Request under Tariff, Part VI, which shall be applied prior to the deposit monies collected for such other studies; and/or

(b) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer.

(5) If any refundable deposit monies remain after the Feasibility Study is complete and any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer have been paid, such remaining deposit monies shall be returned to the Generation Interconnection Customer.

(6) The Interconnection Customer must submit the total required deposit amount with the Generation Interconnection Request. If the Interconnection Customer fails to submit the total required deposit amount with the Generation Interconnection Request, the Generation Interconnection Request shall be deemed to be terminated and withdrawn (i.e., the Generation Interconnection Request shall be terminated prior to reaching the deficiency review stage).

(7) Deposit monies are non-transferrable. Under no circumstances may refundable or non-refundable deposit monies for a specific Interconnection Request or Queue Position be applied in whole or in part to a different New Service Request, Interconnection Request or Queue Position.

x. Primary frequency response operating range for Energy Storage Resources.

2. Deficiency Review. Transmission Provider shall provide a deficiency review of the Generation Interconnection Request to determine whether the Interconnection Customer submitted a valid Generation Interconnection Request.

a. With the exception of evidence of an ownership interest in, or right to acquire or control the generating unit site for a minimum of two years, if a Generation Interconnection Request meets all requirements set forth above the Transmission Provider shall start the deficiency review. Interconnection Customers that fail to provide site control evidence while their requests are available for deficiency review shall not be assigned a Queue Position until the Transmission Provider receives site control evidence that is acceptable to the Transmission Provider.

b. Pursuant to Tariff, Attachment N, section 9, Cost Responsibility, of the Generation Interconnection Feasibility Study Agreement, if the Transmission Provider anticipates that the actual study costs will exceed the refundable portion of the required deposit, the Transmission Provider shall provide the Interconnection Customer with an estimate of the

additional study costs. The estimated additional study costs are non-binding, and additional actual study costs may exceed the estimated additional study cost increases provided by the Transmission Provider. Regardless of whether the Transmission Provider provides the Interconnection Customer with estimated additional study costs, the Interconnection Customer is responsible for and must pay all actual study costs.

i. If the Transmission Provider sends the Interconnection Customer notification of estimated additional study costs during the deficiency review period (as described below), then the Interconnection Customer must either:

(1) Withdraw the Generation Interconnection Request during the deficiency response period (as described below); or

(2) Pay all estimated additional study costs prior to the expiration of the deficiency response period (as described below).

(3) If the Interconnection Customer fails to complete either (1) or (2) above, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

ii. If at any time after the deficiency review period the Transmission Provider provides the Interconnection Customer with notification of estimated additional study costs, the Interconnection Customer must pay such estimated additional study costs within ten Business Days of Transmission Provider sending the Interconnection Customer notification of such estimated additional study costs. If the Interconnection Customer fails to pay such estimated additional study costs within ten Business Days of Transmission Provider sending the Interconnection Customer notification of such estimated additional study costs, then the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

c. If there are deficiencies in the Generation Interconnection Request for any of the requirements set forth above, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to notify the Interconnection Customer (electronically when available to all parties, otherwise written) within fifteen Business Days of receipt of the Generation Interconnection Request that such Generation Interconnection Request is deficient. If Transmission Provider is unable to provide a deficiency review within fifteen Business Days from receipt of the Generation Interconnection Request, Transmission Provider shall use Reasonable Efforts to complete and issue the deficiency review to the

Interconnection Customer as soon thereafter as practicable, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. This notification is referred to as a deficiency notice.

i. The deficiency notice shall clearly set forth the basis upon which the deficiency determination was made.

ii. The Interconnection Customer shall be provided ten Business Days to respond to the deficiency notice. This ten Business Day period is referred to as the deficiency response period.

(1) Within the deficiency response period, the Interconnection Customer shall provide, in full, the additional information and/or evidence (such as generation site control) and/or monies that the Transmission Provider's deficiency notice identified as being required to constitute a valid Generation Interconnection Request.

(2) If the Interconnection Customer fails to clear within the deficiency response period all deficiencies identified by the Transmission Provider in the deficiency notice, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

iii. Without regard to the timing of the Interconnection Customer's deficiency response period, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to review each Interconnection Customer's response to the deficiency notice within fifteen Business Days of the Interconnection Customer submitting its response to the deficiency notice. If Transmission Provider is unable to complete its review of Interconnection Customer's response to the deficiency notice within fifteen Business Days of receiving the response, Transmission Provider shall use Reasonable Efforts to complete such review as soon thereafter as practicable, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. If the Generation Interconnection Request is still deficient after the Transmission Provider's review of Interconnection Customer's response to the deficiency notice and the full ten Business Days of the Interconnection Customer's deficiency response period have expired, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

iv. If the Interconnection Customer fails to respond in full to the Transmission Provider's deficiency notice (including failing to provide all of the additional required information, evidence and/or make payments on any outstanding invoices required by the Transmission Provider's deficiency notice), the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

3. The Interconnection Customer must submit a complete and fully executed Generation Interconnection Feasibility Study Agreement (Tariff, Attachment N) to the Transmission Provider by March 10 for the New Services Queue ending March 31, and by September 10 for the New Services Queue ending September 30. No Generation Interconnection Requests shall be accepted for the relevant New Services Queue after such dates.

4. In accordance with Tariff, Part VI, Preamble, section 201, Transmission Provider shall assign Queue Positions as of the date and time of receipt of all information required pursuant to this section 110.1. If the information required pursuant to this section 110.1 is provided to the Transmission Provider in separate submissions, the Queue Position shall be assigned based on the date and time of receipt of the last required piece of information.

5. Deficiency notices shall be considered cleared as of the date and time the Transmission Provider receives from the Interconnection Customer the last piece of required information deemed acceptable by the Transmission Provider to clear such deficiency notice.

6. Transmission Provider Website Postings.

a. The Transmission Provider shall maintain on the Transmission Provider's website a list of all Generation Interconnection Requests that identifies:

i. The proposed maximum summer and winter megawatt electrical output;

ii. The location of the generation by county and state;

iii. The station or transmission line or lines where the interconnection will be made;

iv. The facility's projected date of Initial Operation;

v. The status of the Generation Interconnection Request, including its Queue Position;

vi. The type of Generation Interconnection Service requested;

vii. The availability of any studies related to the Interconnection Request;

viii. The date of the Generation Interconnection Request;

ix. The type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); and

x. For each Generation Interconnection Request that has not resulted in a completed interconnection, an explanation of why it was not completed.

b. This list shall not disclose the identity of the Generation Interconnection Customer, except as otherwise provided in Tariff, Part IV. The list and the priority of Generation Interconnection Requests shall be included on the Transmission Provider's website as part of the New Services Queue.

## 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 the contingency criteria in the Applicable Standards. 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 shall execute the System Impact Study Agreement and it must be received by the Transmission Provider within thirty (30) days, along with documents demonstrating that an initial air permit application has been filed, if required, and the deposit contained in Tariff, Part VI, Subpart A, section 204.3A. 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.

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 shall execute the Facilities Study Agreement and it must be received by the Transmission Provider within thirty (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, facilities design work 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 as described in Tariff, Part VI, Subpart A, section 206. Transmission Provider will utilize the procedures set forth in Tariff, Part VI, Subpart A, section 207 for completing the Facilities Study. Within 30 calendar days of receiving the Facilities Study, the Interconnection Customer may provide written comments to Transmission Provider regarding the required upgrades identified in the Facilities Study which the Transmission Provider shall consider and include in the Facilities Study and/or the Interconnection Customer may request a meeting to discuss the results of the Facilities Study as specified in Tariff, Part VI, Subpart A, section 207.1. Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the Facilities Study, subject to confidentiality arrangements as required by the 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.

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, as specified in Tariff, Part VI, Subpart B, section 212 and 214. 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.

## 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 (Synchronous) or Greater than 5 MW (Inverter-based)

This section describes procedures related to the submission and processing of requests related to the interconnection of Small Generation Resources that are greater than 2 MW (synchronous) or greater than 5 MW (inverter-based) or the increase in capability of 20 MW or less but greater than 2 MW (synchronous) or greater than 5 MW (inverter-based) 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.

Section 112A describes the procedures related to the submission and processing of requests related to the interconnection of Small Generation Resources that are less than 2MW (synchronous) or 5MW (inverter based), and includes the eligibility considerations for fast track processing. In the event that such interconnection requests do not qualify for processing in accordance with the provisions of section 112A, they will be considered under the procedures described in this section 111, if applicable.

## 111.1 Application

The Interconnection Customer desiring the interconnection of a Small Generation Resource greater than 2 MW or the increase in capability, by 20 MW or less but greater than 2 MW (synchronous) or 5 MW (inverter-based) of an existing resource, must submit to the Transmission Provider a Generation Interconnection Request. The Transmission Provider shall acknowledge receipt of the Generation Interconnection Request (electronically when available to all parties, otherwise written) within five Business Days after receipt of the Generation Interconnection Request.

1. Generation Interconnection Request Requirements.

   a. To be assigned a PJM Queue Position pursuant to Tariff, Part VI, Preamble, section 201, a Generation Interconnection Customer must submit a complete and fully executed Generation Interconnection Feasibility Study Agreement, a form of which is located in the Tariff, Attachment N. To be considered complete at the time of submission, the Interconnection Customer's Generation Interconnection Feasibility Study Agreement must include, at a minimum, each of the following:

      i. specification of the location of the proposed generating unit site or existing generating unit (include both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the generating unit site); and

      ii. evidence of an ownership interest in, or right to acquire or control the generating unit site for a minimum of two years, such as a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider; and

      iii. the MW size of the proposed generating unit or the amount of increase in MW capability of an existing generating unit, and identification of any MW portion of the facility's capability that will be a Capacity Resource; and

      iv. identification of the fuel type of the proposed generating unit or upgrade thereto; and

      v. a description of the equipment configuration, and a set of preliminary electrical design specifications, and, if the generating unit is a wind generation facility, then the set of preliminary electrical design specifications must depict the wind plant as a single equivalent generator; and

      vi. the planned date the proposed generating unit or increase in MW capability of an existing generating unit will be in service, where

such date is to be no more than seven years from the date that a complete and fully executed Generation Interconnection Feasibility Study Agreement is received by the Transmission Provider unless the Interconnection Customer demonstrates that engineering, permitting, and construction of the generating unit or increase in capability will take more than seven years; and

vii. any additional information as may be prescribed by the Transmission Provider in the PJM Manuals; and

viii. If Behind the Meter Generation is identified in the Generation Interconnection Feasibility Study Agreement, all of the requirements in Tariff, Part IV, Subpart A, section 36.1A must also be met; and

ix. Deposit.

(1) A deposit shall be submitted to Transmission Provider, as follows:

(a) A deposit of $10,000 if the Generation Interconnection Request is received in the first four calendar months of the current New Services Queue; or

(b) A deposit of $12,000 if the Generation Interconnection Request is received in the fifth calendar month of the current New Services Queue; or

(c) A deposit of $15,000 if the Generation Interconnection Request is received in the sixth calendar month of the current New Services Queue.

(2) 10% of each total deposit amount is non-refundable. Any unused non-refundable deposit monies shall be returned to the Generation Interconnection Customer upon Initial Operation. However, if, before reaching Initial Operation, the Generation Interconnection Customer withdraws its Generation Interconnection Request, or the Generation Interconnection Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:

(a) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third

party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Generation Interconnection Request and/or associated Queue Position; and/or

(b) Any restudies required as a result of the rejection, termination and/or withdrawal of such Generation Interconnection Request; and/or

(c) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer.

(3) 90% of each total deposit amount is refundable, and the Transmission Provider shall utilize, in no particular order, the refundable portion of each total deposit amount to cover the following:

(a) The cost of the Queue Position acceptance review; and

(b) The cost of the deficiency review of the Interconnection Customer's Generation Interconnection Request (to determine whether the Generation Interconnection Request is valid); and

(c) The dollar amount of the Interconnection Customer's cost responsibility for the Generation Interconnection Feasibility Study; and

(d) If the Generation Interconnection Request is deemed to be modified (pursuant to Tariff, Part IV, Subpart A, section 36.2A), rejected, terminated and/or withdrawn during the deficiency review and/or deficiency response period, as described further below, or during the Feasibility Study period, the refundable deposit money shall be applied to cover all of the costs incurred by the Transmission Provider up to the point of such Generation Interconnection Request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:

(i) The costs of any restudies required as a result of the modification (pursuant to

Tariff, Part IV, Subpart A, section 36.2A), rejection, termination and/or withdrawal of such Generation Interconnection Request; and/or

(ii) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Generation Interconnection Request and/or associated Queue Position; and/or

(iii) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer.

(iv) If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to the Generation Interconnection Customer in accordance with the PJM Manuals.

(4) Upon completion of the Feasibility Study, the Transmission Provider shall apply any remaining refundable deposit monies toward:

(a) The Interconnection Customer's cost responsibility for any other studies conducted for the Generation Interconnection Request under Tariff, Part VI, which shall be applied prior to the deposit monies collected for such other studies; and/or

(b) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer.

(5) If any refundable deposit monies remain after the Feasibility Study is complete and any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer have been paid, such remaining deposit monies shall be returned to the Generation Interconnection Customer.

(6) The Interconnection Customer must submit the total required deposit amount with the Generation Interconnection Request. If the Interconnection Customer fails to submit the total required deposit amount with the Generation Interconnection Request, the Generation Interconnection Request shall be deemed to be terminated and withdrawn (i.e., the Generation Interconnection Request shall be terminated prior to reaching the deficiency review stage).

(7) Deposit monies are non-transferrable. Under no circumstances may refundable or non-refundable deposit monies for a specific Interconnection Request or Queue Position be applied in whole or in part to a different New Service Request, Interconnection Request or Queue Position.

x. Primary frequency response operating range for Energy Storage Resources.

2. Deficiency Review. Transmission Provider shall provide a deficiency review of the Generation Interconnection Request to determine whether the Interconnection Customer submitted a valid Generation Interconnection Request.

a. With the exception of evidence of an ownership interest in, or right to acquire or control the generating unit site for a minimum of two years, if a Generation Interconnection Request meets all requirements set forth above the Transmission Provider shall start the deficiency review. Interconnection Customers that fail to provide site control evidence while their requests are available for deficiency review shall not be assigned a Queue Position until the Transmission Provider receives site control evidence that is acceptable to the Transmission Provider.

b. Pursuant to Tariff, Attachment N, section 9, Cost Responsibility, of the Generation Interconnection Feasibility Study Agreement, if the Transmission Provider anticipates that the actual study costs will exceed the refundable portion of the required deposit, the Transmission Provider shall provide the Interconnection Customer with an estimate of the

additional study costs. The estimated additional study costs are non-binding, and additional actual study costs may exceed the estimated additional study cost increases provided by the Transmission Provider. Regardless of whether the Transmission Provider provides the Interconnection Customer with estimated additional study costs, the Interconnection Customer is responsible for and must pay all actual study costs.

i. If the Transmission Provider sends the Interconnection Customer notification of estimated additional study costs during the deficiency review period (as described below), then the Interconnection Customer must either:

(1) Withdraw the Generation Interconnection Request during the deficiency response period (as described below); or

(2) Pay all estimated additional study costs prior to the expiration of the deficiency response period (as described below).

(3) If the Interconnection Customer fails to complete either (1) or (2) above, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

ii. If at any time after the deficiency review period the Transmission Provider provides the Interconnection Customer with notification of estimated additional study costs, the Interconnection Customer must pay such estimated additional study costs within ten Business Days of Transmission Provider sending the Interconnection Customer notification of such estimated additional study costs. If the Interconnection Customer fails to pay such estimated additional study costs within ten Business Days of Transmission Provider sending the Interconnection Customer notification of such estimated additional study costs, then the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

c. If there are deficiencies in the Generation Interconnection Request for any of the requirements set forth above, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to notify the Interconnection Customer (electronically when available to all parties, otherwise written) within fifteen Business Days of receipt of the Generation Interconnection Request that such Generation Interconnection Request is deficient. If Transmission Provider is unable to provide a deficiency review within fifteen Business Days from receipt of the Generation Interconnection Request, Transmission Provider shall use Reasonable Efforts to complete and issue the deficiency review to the

Interconnection Customer as soon thereafter as practicable, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. This notification is referred to as a deficiency notice.

i. The deficiency notice shall clearly set forth the basis upon which the deficiency determination was made.

ii. The Interconnection Customer shall be provided ten Business Days to respond to the deficiency notice. This ten Business Day period is referred to as the deficiency response period.

(1) Within the deficiency response period, the Interconnection Customer shall provide, in full, the additional information and/or evidence (such as generation site control) and/or monies that the Transmission Provider's deficiency notice identified as being required to constitute a valid Generation Interconnection Request.

(2) If the Interconnection Customer fails to clear within the deficiency response period all deficiencies identified by the Transmission Provider in the deficiency notice, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

iii. Without regard to the timing of the Interconnection Customer's deficiency response period, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to review each Interconnection Customer's response to the deficiency notice within fifteen Business Days of the Interconnection Customer submitting its response to the deficiency notice. If Transmission Provider is unable to complete its review of Interconnection Customer's response to the deficiency notice within fifteen Business Days of receiving the response, Transmission Provider shall use Reasonable Efforts to complete such review as soon thereafter as practicable, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. If the Generation Interconnection Request is still deficient after the Transmission Provider's review of Interconnection Customer's response to the deficiency notice and the full ten Business Days of the Interconnection Customer's deficiency response period have expired, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

iv. If the Interconnection Customer fails to respond in full to the Transmission Provider's deficiency notice (including failing to provide all of the additional required information, evidence and/or make payments on any outstanding invoices required by the Transmission Provider's deficiency notice), the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

3. The Interconnection Customer must submit a complete and fully executed Generation Interconnection Feasibility Study Agreement (Tariff, Attachment N) to the Transmission Provider by March 10 for the New Services Queue ending March 31, and by September 10 for the New Services Queue ending September 30. No Generation Interconnection Requests shall be accepted for the relevant New Services Queue after such dates.

4. In accordance with Tariff, Part VI, Preamble, section 201, Transmission Provider shall assign Queue Positions as of the date and time of receipt of all information required pursuant to this section 111.1. If the information required pursuant to this section 111.1 is provided to the Transmission Provider in separate submissions, the Queue Position shall be assigned based on the date and time of receipt of the last required piece of information.

5. Deficiency notices shall be considered cleared as of the date and time the Transmission Provider receives from the Interconnection Customer the last piece of required information deemed acceptable by the Transmission Provider to clear such deficiency notice.

6. Transmission Provider Website Postings.

a. The Transmission Provider shall maintain on the Transmission Provider's website a list of all Generation Interconnection Requests that identifies:

i. The proposed maximum summer and winter megawatt electrical output;

ii. The location of the generation by county and state;

iii. The station or transmission line or lines where the interconnection will be made;

iv. The facility's projected date of Initial Operation;

v. The status of the Generation Interconnection Request, including its Queue Position;

vi. The type of Generation Interconnection Service requested;

vii. The availability of any studies related to the Interconnection Request;

viii. The date of the Generation Interconnection Request;

ix. The type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); and

x. For each Generation Interconnection Request that has not resulted in a completed interconnection, an explanation of why it was not completed.

b. This list shall not disclose the identity of the Generation Interconnection Customer, except as otherwise provided in Tariff, Part IV. The list and the priority of Generation Interconnection Requests shall be included on the Transmission Provider's website as part of the New Services Queue.

## 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 the contingency criteria in the Applicable Standards. 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 shall execute the System Impact Study Agreement and it must be received by the Transmission Provider within thirty (30) days, along with documents demonstrating that an initial air permit application has been filed, if required, and the deposit contained in Tariff, Part VI, Subpart A, section 204.3A. 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 shall execute the Facilities Study Agreement and it must be received by the Transmission Provider within thirty (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, facilities design work 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 as described in Tariff, Part VI, Subpart A, section 206. Transmission Provider will utilize the procedures set forth in Tariff, Part VI, Subpart A, section 207 for completing the Facilities Study. Within 30 calendar days of receiving the Facilities Study, the Interconnection Customer may provide written comments to Transmission Provider regarding the required upgrades identified in the Facilities Study which the Transmission Provider shall consider and include in the Facilities Study and/or the Interconnection Customer may request a meeting to discuss the results of the Facilities Study as specified in Tariff, Part VI, Subpart A, section 207.1. Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the Facilities Study, subject to confidentiality arrangements as required by the 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.

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 as specified in Tariff, Part VI, Subpart B, section 212 and 214. 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 (Synchronous) or Greater than 5 MW (Inverter-based)

This section describes procedures related to the submission and processing of requests related to the temporary interconnection of Small Generation Resources greater than 2 MW (synchronous) or 5 MW (inverter-based). 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.

Section 112A describes the procedures related to the submission and processing of requests related to the interconnection of Small Generation Resources that are less than 2MW (synchronous) or 5MW (inverter based), and includes the eligibility considerations for fast track processing. In the event that such interconnection requests do not qualify for processing in accordance with the provisions of section 112A, they will be considered under the procedures described in this section 112, if applicable.

## 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 (synchronous) or 5 MW (inverter-based) must submit to the Transmission Provider a Generation Interconnection Request. The Transmission Provider shall acknowledge receipt of the Generation Interconnection Request (electronically when available to all parties, otherwise written) within five Business Days after receipt of the Generation Interconnection Request.

1. Generation Interconnection Request Requirements.

   a. To be assigned a PJM Queue Position pursuant to Tariff, Part VI, Preamble, section 201, a Generation Interconnection Customer must submit a complete and fully executed Generation Interconnection Feasibility Study Agreement, a form of which is located in the Tariff, Attachment N. To be considered complete at the time of submission, the Interconnection Customer's Generation Interconnection Feasibility Study Agreement must include, at a minimum, each of the following:

      i. specification of the location of the proposed generating unit site or existing generating unit (include both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the generating unit site); and

      ii. evidence of an ownership interest in, or right to acquire or control the generating unit site for a minimum of two years, such as a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider; and

      iii. the MW size of the proposed generating unit or the amount of increase in MW capability of an existing generating unit, and identification of any MW portion of the facility's capability that will be a Capacity Resource; and

      iv. identification of the fuel type of the proposed generating unit or upgrade thereto; and

      v. a description of the equipment configuration, and a set of preliminary electrical design specifications, and, if the generating unit is a wind generation facility, then the set of preliminary electrical design specifications must depict the wind plant as a single equivalent generator; and

      vi. the planned date the proposed generating unit or increase in MW capability of an existing generating unit will be in service, where such date is to be no more than seven years from the date that a

complete and fully executed Generation Interconnection Feasibility Study Agreement is received by the Transmission Provider unless the Interconnection Customer demonstrates that engineering, permitting, and construction of the generating unit or increase in capability will take more than seven years; and

vii. any additional information as may be prescribed by the Transmission Provider in the PJM Manuals; and

viii. If Behind the Meter Generation is identified in the Generation Interconnection Feasibility Study Agreement, all of the requirements in Tariff, Part IV, Subpart A, section 36.1A must also be met; and

ix. Deposit.

(1) A deposit shall be submitted to Transmission Provider, as follows:

(a) A deposit of $10,000 if the Generation Interconnection Request is received in the first four calendar months of the current New Services Queue; or

(b) A deposit of $12,000 if the Generation Interconnection Request is received in the fifth calendar month of the current New Services Queue; or

(c) A deposit of $15,000 if the Generation Interconnection Request is received in the sixth calendar month of the current New Services Queue.

(2) 10% of each total deposit amount is non-refundable. Any unused non-refundable deposit monies shall be returned to the Generation Interconnection Customer upon Initial Operation. However, if, before reaching Initial Operation, the Generation Interconnection Customer withdraws its Generation Interconnection Request, or the Generation Interconnection Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:

(a) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any

failure of the Interconnection Customer to pay actual costs for the Generation Interconnection Request and/or associated Queue Position; and/or

(b) Any restudies required as a result of the rejection, termination and/or withdrawal of such Generation Interconnection Request; and/or

(c) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer.

(3) 90% of each total deposit amount is refundable, and the Transmission Provider shall utilize, in no particular order, the refundable portion of each total deposit amount to cover the following:

(a) The cost of the Queue Position acceptance review; and

(b) The cost of the deficiency review of the Interconnection Customer's Generation Interconnection Request (to determine whether the Generation Interconnection Request is valid); and

(c) The dollar amount of the Interconnection Customer's cost responsibility for the Generation Interconnection Feasibility Study; and

(d) If the Generation Interconnection Request is deemed to be modified (pursuant to Tariff, Part IV, Subpart A, section 36.2A), rejected, terminated and/or withdrawn during the deficiency review and/or deficiency response period, as described further below, or during the Feasibility Study period, the refundable deposit money shall be applied to cover all of the costs incurred by the Transmission Provider up to the point of such Generation Interconnection Request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:

(i) The costs of any restudies required as a result of the modification (pursuant to Tariff, Part IV, Subpart A, section 36.2A),

rejection, termination and/or withdrawal of such Generation Interconnection Request; and/or

(ii) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Generation Interconnection Request and/or associated Queue Position; and/or

(iii) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer.

(iv) If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to the Generation Interconnection Customer in accordance with the PJM Manuals.

(4) Upon completion of the Feasibility Study, the Transmission Provider shall apply any remaining refundable deposit monies toward:

(a) The Interconnection Customer's cost responsibility for any other studies conducted for the Generation Interconnection Request under Tariff, Part VI, which shall be applied prior to the deposit monies collected for such other studies; and/or

(b) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer.

(5) If any refundable deposit monies remain after the Feasibility Study is complete and any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests by the Interconnection Customer have been paid, such remaining deposit monies shall be returned to the Generation Interconnection Customer.

(6) The Interconnection Customer must submit the total required deposit amount with the Generation Interconnection Request. If the Interconnection Customer fails to submit the total required deposit amount with the Generation Interconnection Request, the Generation Interconnection Request shall be deemed to be terminated and withdrawn (i.e., the Generation Interconnection Request shall be terminated prior to reaching the deficiency review stage).

(7) Deposit monies are non-transferrable. Under no circumstances may refundable or non-refundable deposit monies for a specific Interconnection Request or Queue Position be applied in whole or in part to a different New Service Request, Interconnection Request or Queue Position.

x. Primary frequency response operating range for Energy Storage Resources.

2. Deficiency Review. Transmission Provider shall provide a deficiency review of the Generation Interconnection Request to determine whether the Interconnection Customer submitted a valid Generation Interconnection Request.

a. With the exception of evidence of an ownership interest in, or right to acquire or control the generating unit site for a minimum of two years, if a Generation Interconnection Request meets all requirements set forth above the Transmission Provider shall start the deficiency review. Interconnection Customers that fail to provide site control evidence while their requests are available for deficiency review shall not be assigned a Queue Position until the Transmission Provider receives site control evidence that is acceptable to the Transmission Provider.

b. Pursuant to Tariff, Attachment N, section 9, Cost Responsibility, of the Generation Interconnection Feasibility Study Agreement, if the Transmission Provider anticipates that the actual study costs will exceed the refundable portion of the required deposit, the Transmission Provider shall provide the Interconnection Customer with an estimate of the

additional study costs. The estimated additional study costs are non-binding, and additional actual study costs may exceed the estimated additional study cost increases provided by the Transmission Provider. Regardless of whether the Transmission Provider provides the Interconnection Customer with estimated additional study costs, the Interconnection Customer is responsible for and must pay all actual study costs.

i. If the Transmission Provider sends the Interconnection Customer notification of estimated additional study costs during the deficiency review period (as described below), then the Interconnection Customer must either:

(1) Withdraw the Generation Interconnection Request during the deficiency response period (as described below); or

(2) Pay all estimated additional study costs prior to the expiration of the deficiency response period (as described below).

(3) If the Interconnection Customer fails to complete either (1) or (2) above, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

ii. If at any time after the deficiency review period the Transmission Provider provides the Interconnection Customer with notification of estimated additional study costs, the Interconnection Customer must pay such estimated additional study costs within ten Business Days of Transmission Provider sending the Interconnection Customer notification of such estimated additional study costs. If the Interconnection Customer fails to pay such estimated additional study costs within ten Business Days of Transmission Provider sending the Interconnection Customer notification of such estimated additional study costs, then the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

c. If there are deficiencies in the Generation Interconnection Request for any of the requirements set forth above, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to notify the Interconnection Customer (electronically when available to all parties, otherwise written) within fifteen Business Days of receipt of the Generation Interconnection Request that such Generation Interconnection Request is deficient. If Transmission Provider is unable to provide a deficiency review within fifteen Business Days from receipt of the Generation Interconnection Request, Transmission Provider shall use Reasonable Efforts to complete and issue the deficiency review to the

Interconnection Customer as soon thereafter as practicable, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. This notification is referred to as a deficiency notice.

i. The deficiency notice shall clearly set forth the basis upon which the deficiency determination was made.

ii. The Interconnection Customer shall be provided ten Business Days to respond to the deficiency notice. This ten Business Day period is referred to as the deficiency response period.

(1) Within the deficiency response period, the Interconnection Customer shall provide, in full, the additional information and/or evidence (such as generation site control) and/or monies that the Transmission Provider's deficiency notice identified as being required to constitute a valid Generation Interconnection Request.

(2) If the Interconnection Customer fails to clear within the deficiency response period all deficiencies identified by the Transmission Provider in the deficiency notice, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

iii. Without regard to the timing of the Interconnection Customer's deficiency response period, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to review each Interconnection Customer's response to the deficiency notice within fifteen Business Days of the Interconnection Customer submitting its response to the deficiency notice. If Transmission Provider is unable to complete its review of Interconnection Customer's response to the deficiency notice within fifteen Business Days of receiving the response, Transmission Provider shall use Reasonable Efforts to complete such review as soon thereafter as practicable , but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. If the Generation Interconnection Request is still deficient after the Transmission Provider's review of Interconnection Customer's response to the deficiency notice and the full ten Business Days of the Interconnection Customer's deficiency response period have expired, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

iv. If the Interconnection Customer fails to respond in full to the Transmission Provider's deficiency notice (including failing to provide all of the additional required information, evidence and/or make payments on any outstanding invoices required by the Transmission Provider's deficiency notice), the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

3. The Interconnection Customer must submit a complete and fully executed Generation Interconnection Feasibility Study Agreement (Tariff, Attachment N) to the Transmission Provider by March 10 for the New Services Queue ending March 31, and by September 10 for the New Services Queue ending September 30. No Generation Interconnection Requests shall be accepted for the relevant New Services Queue after such dates.

4. In accordance with Tariff, Part VI, Preamble, section 201, Transmission Provider shall assign Queue Positions as of the date and time of receipt of all information required pursuant to this section 112.1. If the information required pursuant to this section 112.1 is provided to the Transmission Provider in separate submissions, the Queue Position shall be assigned based on the date and time of receipt of the last required piece of information.

5. Deficiency notices shall be considered cleared as of the date and time the Transmission Provider receives from the Interconnection Customer the last piece of required information deemed acceptable by the Transmission Provider to clear such deficiency notice.

6. Because temporary Energy Resources are not granted any long term rights with respect to the transmission system, such requests shall not be identified in the New Services Queue on the PJM website. A separate queue of such requests shall 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 as specified in Tariff, Part VI, Subpart B, section 212 and 214, 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 Permanent or Temporary Energy Resources of 2 MW or Less (Synchronous) or 5 MW or Less (Inverter-based).**

**Fast Track Eligibility**

The screens process is available to an Interconnection Customer proposing to interconnect its Energy Resource with the Transmission Provider's system if the Energy Resource capacity does not exceed the size limits identified in the table below. Energy Resources below these limits are eligible for the screens process. However, eligibility is distinct from the screens process itself, and eligibility does not imply or indicate that an Energy Resource will pass the screens in section 112A.2 below or the Supplemental Review screens in section 112A.5.3 below.

Eligibility is determined based upon the generator type, the size of the generator, voltage of the line and the location of and the type of line at the Point of Interconnection. All Energy Resources connecting to lines greater than 69 kilovolt (kV) are ineligible for this process regardless of size. All synchronous and induction machines must be no larger than 2 MW to be eligible for this process, regardless of location. For certified inverter-based systems, the size limit varies according to the voltage of the line at the proposed Point of Interconnection. Certified inverter-based Energy Resources located within 2.5 electrical circuit miles of a substation and on a mainline (as defined in the table below) are eligible for this process under the higher thresholds according to the table below. In addition to the size threshold, the Interconnection Customer's proposed Energy Resource must meet the codes, standards and certification requirements of Attachments Z and AA of this Tariff. Alternatively, the Transmission Provider has to have reviewed the design or tested the proposed Energy Resource and is satisfied that it is safe to operate.

| Fast Track Eligibility for Inverter-Based Systems | | |
|---|---|---|
| Line Voltage | 112A Eligibility Regardless of Location | 112A Eligibility on a Mainline[1] and ≤ 2.5 Electrical Circuit Miles from Substation[2] |
| < 5 kV | ≤ 500 kW | ≤ 500 kW |
| ≥ 5 kV and < 15 kV | ≤ 2 MW | ≤ 3 MW |
| ≥ 15 kV and < 30 kV | ≤ 3 MW | ≤ 4 MW |
| ≥ 30 kV and ≤ 69 kV | ≤ 4 MW | ≤ 5 MW |

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 above, as applicable.

[1] For purposes of this table, a mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

[2] An Interconnection Customer can determine this information about its proposed interconnection location in advance by requesting a pre-application report pursuant to section 1.2.

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 (synchronous) or 5 MW or less (inverter-based) must submit to the Transmission Provider an Interconnection Request. The Transmission Provider shall acknowledge receipt of the Interconnection Request (electronically when available to all parties, otherwise written) within five Business Days after receipt of the Interconnection Request.

1. Interconnection Request Requirements.

   a. To be assigned a PJM Queue Position pursuant to Tariff, Part VI, Preamble, section 201, an Interconnection Customer must submit a complete and fully executed Form of Screens Process Interconnection Request (For Generation Facilities of 2 MW or Less Synchronous 5 MW or Less Inverter-Based), a form of which is located in the Tariff, Attachment Y. To be considered complete at the time of submission, the Interconnection Customer's Form of Screens Process Interconnection Request (For Generation Facilities of 2 MW or Less Synchronous 5 MW or Less Inverter-Based) must include, at a minimum, each of the following:

      i. Interconnection Customer Information; and

      ii. Energy Resource Information; and

      iii. Energy Resource Characteristic Data; and

      iv. Interconnection Facilities Information; and

      v. Diagrams and Site Control; and

      vi. Deposit.

         (1) A deposit shall be submitted to Transmission Provider, as follows:

            (a) A deposit of $2,000 if the Interconnection Request is received in the first four calendar months of the current New Services Queue; or

            (b) A deposit of $3,000 if the Interconnection Request is received in the fifth calendar month of the current New Services Queue; or

            (c) A deposit of $5,000 if the Interconnection Request is received in the sixth calendar month of the current New Services Queue.

(2) 10% of each total deposit amount is non-refundable. Any unused non-refundable deposit monies shall be returned to the Interconnection Customer upon Initial Operation. However, if, before reaching Initial Operation, the Interconnection Customer withdraws its Interconnection Request, or the Interconnection Request is otherwise deemed rejected or terminated and withdrawn, any unused portion of the non-refundable deposit monies shall be used to fund:

(a) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Interconnection Request and/or associated Queue Position; and/or

(b) Any restudies required as a result of the rejection, termination and/or withdrawal of such Interconnection Request; and/or

(c) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests and/or Queue Positions by the Interconnection Customer.

(3) 90% of each total deposit amount is refundable, and the Transmission Provider shall utilize, in no particular order, the refundable portion of each total deposit amount to cover the following:

(a) The cost of the screens evaluation and/or supplemental screens evaluations; and

(b) The dollar amount of the Interconnection Customer's cost responsibility for the Interconnection Feasibility Study; and

(c) If the Interconnection Request is deemed to be modified (pursuant to Tariff, Part IV, Subpart A, section 36.2A), rejected, terminated and/or withdrawn during the deficiency review and/or deficiency response period, as described further

below, or during the screens evaluation period, the refundable deposit money shall be applied to cover all of the costs incurred by the Transmission Provider up to the point of such Interconnection Request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:

(i) The costs of any restudies required as a result of the modification (pursuant to Tariff, Part IV, Subpart A, section 36.2A), rejection, termination and/or withdrawal of such Interconnection Request; and/or

(ii) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices due to Transmission Provider, Interconnected Transmission Owner(s) and/or third party contractors, as applicable, as a result of any failure of the Interconnection Customer to pay actual costs for the Interconnection Request and/or associated Queue Position; and/or

(iii) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests and/or Queue Positions by the Interconnection Customer.

(iv) If any refundable deposit monies remain after all costs and outstanding monies owed, as described in this section, are covered, such remaining refundable deposit monies shall be returned to the Interconnection Customer in accordance with the PJM Manuals.

(4) Upon completion of the screens evaluations, the Transmission Provider shall apply any remaining refundable deposit monies toward:

(a) The Interconnection Customer's cost responsibility for any other studies conducted for the Interconnection Request under Tariff, Part VI,

which shall be applied prior to the deposit monies collected for such other studies; and/or

(b) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests and/or Queue Positions by the Interconnection Customer.

(5) If any refundable deposit monies remain after the screens evaluations are complete and any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Generation Interconnection Requests and/or Queue Positions by the Interconnection Customer have been paid, such remaining deposit monies shall be returned to the Interconnection Customer.

(6) The Interconnection Customer must submit the total required deposit amount with the Interconnection Request. If the Interconnection Customer fails to submit the total required deposit amount with the Interconnection Request, the Interconnection Request shall be deemed to be terminated and withdrawn (i.e., the Interconnection Request shall be terminated prior to reaching the screens evaluations and/or deficiency review stage).

(7) Deposit monies are non-transferrable. Under no circumstances may refundable or non-refundable deposit monies for a specific Interconnection Request or Queue Position be applied in whole or in part to a different New Service Request or Interconnection Request or Queue Position.

vii. Primary frequency response operating range for Energy Storage Resources.

2. Deficiency Review. Transmission Provider shall provide a deficiency review of the Interconnection Request to determine whether the Interconnection Customer submitted a valid Interconnection Request.

a. If an Interconnection Request meets all of the requirements set forth above, the Transmission Provider shall start the deficiency review.

b. If there are deficiencies in the Interconnection Request for any of the requirements set forth above, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue

to notify the Interconnection Customer (electronically when available to all parties, otherwise written) within fifteen Business Days of receipt of the Interconnection Request that such Interconnection Request is deficient. If Transmission Provider is unable to provide a deficiency review within fifteen Business Days from receipt of the Generation Interconnection Request, Transmission Provider shall use Reasonable Efforts to complete and issue the deficiency review to the Interconnection Customer as soon thereafter as practicable, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. This notification is referred to as a deficiency notice.

i. The deficiency notice shall clearly set forth the basis upon which the deficiency determination was made.

ii. The Interconnection Customer shall be provided ten Business Days to respond to the deficiency notice. This ten Business Day period is referred to as the deficiency response period.

(1) Within the deficiency response period, the Interconnection Customer shall provide, in full, the additional information and/or evidence and/or monies that the Transmission Provider's deficiency notice identified as being required to constitute a valid Interconnection Request.

(2) If the Interconnection Customer fails to clear within the deficiency response period all deficiencies identified by the Transmission Provider in the deficiency notice, the Interconnection Request shall be deemed to be terminated and withdrawn.

iii. Without regard to the timing of the Interconnection Customer's deficiency response period, the Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to review each Interconnection Customer's response to the deficiency notice within fifteen Business Days of the Interconnection Customer submitting its response to the deficiency notice. If Transmission Provider is unable to complete its review of Interconnection Customer's response to the deficiency notice within fifteen Business Days of receiving the response, Transmission Provider shall use Reasonable Efforts to complete such review as soon thereafter as practicable, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2. If the Generation Interconnection Request

is still deficient after the Transmission Provider's review of Interconnection Customer's response to the deficiency notice and the full ten Business Days of the Interconnection Customer's deficiency response period have expired, the Interconnection Requests shall be deemed to be terminated and withdrawn.

iv. If the Interconnection Customer fails to respond in full to the Transmission Provider's deficiency notice (including failing to provide all of the additional required information, evidence and/or make payments on any outstanding invoices required by the Transmission Provider's deficiency notice), the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

3. The Interconnection Customer must submit a complete and fully executed Form of Screens Process Interconnection Request (For Generation Facilities of 2 MW or Less Synchronous 5 MW or Less Inverter-Based) (Tariff, Attachment Y) to the Transmission Provider by March 10 for the New Services Queue ending March 31, and by September 10 for the New Services Queue ending September 30. No Generation Interconnection Requests shall be accepted for the relevant New Services Queue after such dates.

4. In accordance with Tariff, Part VI, Preamble, section 201, Transmission Provider shall assign Queue Positions as of the date and time of receipt of all information required pursuant to Tariff, Part IV, Subpart G, section 112A. If the information required pursuant to Tariff, Part IV, Subpart G, section 112A is provided to the Transmission Provider in separate submissions, the Queue Position shall be assigned based on the date and time of receipt of the last required piece of information.

5. Deficiency notices shall be considered cleared as of the date and time the Transmission Provider receives from the Interconnection Customer the last piece of required information deemed acceptable by the Transmission Provider to clear such deficiency notice.

6. Transmission Provider Website Postings.

a. The Transmission Provider shall maintain on the Transmission Provider's website a list of all Interconnection Requests that identifies:

i. The proposed maximum summer and winter megawatt electrical output;

ii. The location of the generation by county and state;

iii. The station or transmission line or lines where the interconnection will be made;

iv. The facility's projected date of Initial Operation;

v. The status of the Interconnection Request, including its Queue Position;

vi. The type of Interconnection Service requested;

vii. The availability of any studies related to the Interconnection Request;

viii. The date of the Interconnection Request;

ix. The type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); and

x. For each Interconnection Request that has not resulted in a completed interconnection, an explanation of why it was not completed.

b. This list shall not disclose the identity of the Interconnection Customer, except as otherwise provided in Tariff, Part IV. The list and the priority of Interconnection Requests shall be included on the Transmission Provider's website as part of the New Services Queue.

**112A.2 Screens.** Subject to the Interconnection Customer, Transmission Provider and Interconnected Transmission Owner(s) mutually agreeing to reasonable extension of time beyond 15 business days, which agreement shall not be unreasonably withheld, within 15 business days of the Interconnection Customer submitting an Interconnection Request pursuant to Tariff, Part IV, Subpart G, section 112A.1, Transmission Provider in consultation with the relevant Interconnected Transmission Owner(s) shall:

1. Provide a screens review/evaluation of the Interconnection Request using the screens set forth below; and

2. Notify the Interconnection Customer of the results of the initial review/evaluation and inform the Interconnection Customer whether supplemental screens evaluations must be performed; and

3. Provide the Interconnection Customer with the analysis and data underlying the Transmission Provider's determinations pursuant to the screens set forth below.

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 | Type of Interconnection to Primary Distribution Line | Result/Criteria |
|---|---|---|
| Three-phase, three wire | 3-phase or single phase, phase-to-phase | Pass screen |
| Three-phase, four wire | Effectively-grounded 3 phase or Single-phase, line-to-neutral | Pass screen |

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.

112A.2.9 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.2 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.

112A.3.2 If the proposed interconnection of the Energy Resource fails the screens set forth in section 112A.2 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. 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.3.3 If the proposed interconnection of the Energy Resource fails the screens set forth in section 112A.2 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: (1) minor modifications at minimal cost; (2) a supplemental study or other additional studies or actions; or (3) incurring at significant cost to address safety, reliability, or power quality problems, the Transmission Provider shall notify the Interconnection Customer of that determination within five Business Days 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. If the Interconnection Customer agrees to pay for the modifications to the Transmission Provider's system, the Transmission Provider will provide the Interconnection Customer with an executable Interconnection Service Agreement within ten Business Days of the customer options meeting; or

112A.4.1.2 Offer to perform a supplemental review in accordance with section 112A.5 , 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 (irrespective of the resource size limitations stated therein), as applicable.

## 112A.5 Supplemental Review

112A.5.1 To accept the offer of a supplemental review, the Interconnection Customer shall agree in writing, and submit a deposit for the estimated costs of the supplemental review in the amount of the Transmission Provider's good faith estimate of the costs of such review (recognizing that such amount may be adjusted by the amount of deposits already held by the Transmission Provider in connection with the Interconnection Request) both within 15 Business Days of the offer. If the written agreement and additional deposit (if required) have not been received by the Transmission Provider within that timeframe, the Interconnection Request shall continue to be evaluated under Section 111 or 112 of this Subpart G (irrespective of the resource size limitation set forth therein) unless it is withdrawn by the Interconnection Customer.

112A.5.2 The Interconnection Customer may specify the order in which the Transmission Provider will complete the screens in section 112A.5.4.

112A.5.3 Within 30 Business Days following receipt of the deposit for a supplemental review, the Transmission Provider shall: (1) perform a supplemental review using the screens set forth below; (2) notify, in writing, the Interconnection Customer of the results; and (3) include with the notification copies of the analysis and data underlying the Transmission Provider's determinations under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, the Transmission Provider shall notify the Interconnection Customer following the failure of any of the screens, or if it is unable to perform the screen in section 112A.5.3.1, within two Business Days of making such a determination to obtain the Interconnection Customer's permission to: (1) continue evaluating the proposed interconnection under this section 112A.5.3; (2) terminate the supplemental review and continue evaluating the Energy Resource under section 111 or 112 (irrespective of the resource size limitation set forth therein), as applicable; or (3) terminate the supplemental review upon withdrawal of the Interconnection Request by the Interconnection Customer.

112A.5.3.1 Minimum Load Screen: Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed small Energy Resource) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate Generating Facility capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed small Energy Resource. If minimum load data is not available, or cannot be calculated, estimated or determined, the Transmission Provider shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under section 112A.5.3.

112A.5.3.1.1 The type of generation used by the proposed Energy Resource will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of screen 112A.5.3.1. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum load (i.e., 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m.

for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.

112A.5.3.1.2 When this screen is being applied to an Energy Resource that services some station service load, only the net injection into the Transmission Provider's electric system will be considered as part of the aggregate generation.

112A.5.3.1.3 Transmission Provider will not consider as part of the aggregate generation for purposes of this screen generating facility capacity known to be already reflected in the minimum load data.

112A.5.3.2 Voltage and Power Quality Screen: In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuation is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.

112A.5.3.3 Safety and Reliability Screen: The location of the proposed small Energy Resource and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the Study Process. The Transmission Provider shall give due consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.

112A.5.3.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).

112A.5.3.3.2 Whether the loading along the line section is uniform or even.

112A.5.3.3.3 Whether the proposed small Energy Resource is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a Mainline rated for normal and emergency ampacity.

112A.5.3.3.4 Whether the proposed small Energy Resource incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

112A.5.3.3.5 Whether operational flexibility is reduced by the proposed small Energy Resource, such that transfer of the line section(s) of the small Energy Resource to a neighboring distribution circuit/substation may trigger overloads or voltage issues.

112A.5.3.3.6 Whether the proposed small Energy Resource employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.

112A.5.3.4 If the proposed interconnection passes the supplemental screens in sections 112A.5.3.1, 112A.5.3.2, and 112A.5.3.3 above, the Interconnection Request shall be approved and the Transmission Provider will provide the Interconnection Customer with an executable Interconnection Service Agreement within the timeframes established in section 112A.5.3.4..1 and 112A.5.3.4.2 below. If the proposed interconnection fails any of the supplemental review screens and the Interconnection Customer does not withdraw its Interconnection Request, it shall continue to be evaluated under section 111 or 112 (irrespective of the resource size limitation set forth therein) consistent with section 112A.5.3.4.3 below

112A.5.3.4.1 If the proposed interconnection passes the supplemental screens in sections 112A.5.3.1, 112A.5.3.2 and 112A.5.3.3 above and does not require construction of facilities by the Transmission Provider on its own system, the Interconnection Service Agreement shall be provided within ten Business Days after notification of the supplemental review results.

112A.5.3.4.2 If interconnection facilities or minor modifications to the Transmission Provider's system are required for the proposed interconnection to pass the supplemental screens in sections 112A.5.3.1, 112A.5.3.2 and 112A.5.3.3 above, and the Interconnection Customer agrees to pay for the modifications to the Transmission Provider's electric system, the Interconnection Service Agreement, along with a non-binding good faith estimate for the interconnection facilities and/or minor modifications, shall be provided to the Interconnection Customer within 15 Business Days after receiving written notification of the supplemental review results.

112A.5.3.4.3 If the proposed interconnection would require more than interconnection facilities or minor modifications to the Transmission Provider's system to pass the supplemental screens in sections 112A.5.3.1, 112A.5.3.2 and 112A.5.3.3 above, the Transmission Provider shall notify the Interconnection Customer, at the same time it notifies the Interconnection Customer with the supplemental review results, that the Interconnection Request shall be evaluated under Sections 111 and 112 (irrespective of the resource size limitation set forth therein) unless the Interconnection Customer withdraws its request.

## 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 Tariff, Attachment BB - Form of Interconnection Service Agreement for Certified Inverter-Based Generating Facility ("Small Inverter ISA") and a non-refundable processing fee of $500. Tariff, 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 five Business Days of receipt. Transmission Provider shall use Reasonable Efforts consistent with the volume of the New Services Queue to notify Interconnection Customer within fifteen Business Days of receipt of the Small Inverter ISA that the Small Inverter ISA is complete or identify any deficiencies that need to be addressed, but, in no event shall the Transmission Provider's response herein serve as a basis to delaying Transmission Provider's compliance with the Interconnection Feasibility Study provisions of the Tariff, Part IV, Subpart A, section 36.2.

The Interconnection Customer must submit a complete and fully executed Small Inverter ISA (Tariff, Attachment BB) to the Transmission Provider by March 10 for the New Services Queue ending March 31, and by September 10 for the New Services Queue ending September 30. No Small Inverter ISA shall be accepted for the relevant New Services Queue after such dates.

## 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.4 Interconnection 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.5 Safe 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.6 Access**

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.

**112C [Reserved]**