



PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403

Pauline Foley
Associate General Counsel
T: (610) 666-8248 | F: (610) 666-8211
pauline.foley@pjm.com

February 21, 2018

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A
Washington, D.C. 20426

Re: *PJM Interconnection, L.L.C., Docket No. ER18-893-000*
PJM Open Access Transmission Tariff – Corrections and Clarifications

Dear Secretary Bose:

Pursuant to section 205 of the Federal Power Act¹ and part 35 of the rules and regulations of the Federal Energy Regulatory Commission (“Commission” or “FERC”),² PJM Interconnection, L.L.C. (“PJM”), submits for filing numerous non-substantive, clerical, and ministerial, as well as some substantive revisions, to correct, clarify and/or make consistent certain provisions in the PJM Open Access Transmission Tariff (“Tariff”)³ specific to the generation and transmission interconnection process. PJM requests an effective date of April 23, 2018, which is a date at least 60 days from the date of this filing for the proposed revisions.

I. BACKGROUND

PJM with its stakeholders has undertaken a comprehensive review of the Tariff to identify those provisions requiring revisions to correct, clarify and ensure consistency in various sections of the Tariff relative to PJM’s interconnection processes. PJM and its stakeholders conducted this review using the Governing Documents Enhancement Subcommittee (“GDECS”)

¹ 16 U.S.C. § 824d.

² 18 C.F.R. part 35 (2017).

³ Capitalized terms not otherwise defined herein have the meaning specified in, as applicable, the Tariff, Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., or Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

stakeholder process. As noted in other filings proposing clean-up and clarifying revisions,⁴ the GDECS was established as a means through which to continually review and make non-controversial substantive and non-substantive revisions to the PJM Governing Documents.⁵ Through these ongoing efforts, PJM has identified a number of necessary revisions to Parts IV and VI of the Tariff. To identify and facilitate the Commission's understanding of the proposed changes, PJM is including a chart set forth in Exhibit A, which details each change and the reason for the requested revisions.

II. STAKEHOLDER PROCESS

In March 2016, PJM worked with its stakeholders through the GDECS to review proposed final clean-up changes to PJM Tariff, Parts IV and VI that were previously approved by stakeholders at the Markets and Reliability Committee and Members Committee in February 2013.⁶ By way of explanation as to the timing of this filing, after presenting proposed revisions to the PJM stakeholders in 2013 ("2013 Revisions"), PJM determined independently that the Tariff required a more holistic review of the process for Merchant Network Upgrades ("MNU"). Thus, PJM withheld filing the 2013 Revisions, re-evaluated the Tariff process as it related to MNUs and opened a problem statement at the Planning Committee to address the MNU interconnection process. Following almost two years of review by PJM, internally and with its stakeholders, PJM proposed a holistic set of MNU revisions that included Tariff Definitions, as well as revisions to Parts IV and VI, and Attachments O, O-1, P, DD, EE and GG.

⁴ See, e.g., Governing Document Corrections and Clarifications, Docket No. ER17-1372-000, at 1-2 (Mar. 31, 2017). The Commission accepted these revisions in *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER17-1372 (May 17, 2017).

⁵ As specified in the GDECS Charter, the GDECS will not propose new processes, rules, practice or procedures that otherwise should be developed through a more substantive stakeholder process.

⁶ The proposed revisions were endorsed by both the Markets and Reliability Committee and Members Committee by acclamation with no objections or abstentions.

PJM presented the MNU revisions to the Markets and Reliability Committee on July 23, 2015 and the Members Committee on August 27, 2015. The proposed MNU revisions were endorsed by acclamation with no objections or abstentions. The MNU revisions, which included many of the 2013 Revisions, were subsequently filed with and accepted by the Commission in Docket No. ER16-757-000.⁷

The remaining 2013 Revisions were then brought to stakeholders at the GDEC in January 2016. During the GDEC review process, PJM discussed the rationale for each proposed revision, and deleted those revisions addressed and accepted by the Commission in the MNU Filing. Coincident with the GDEC review, the Earlier Queue Submittal Task Force was formed to review additional Tariff revisions to address early queue submittals, which Tariff sections appeared to overlap the provisions relative to the remaining 2013 Revisions. PJM again withheld filing the remaining 2013 Revisions pending approval of the revisions specific to early queue submittals.⁸ The revisions proposed herein are those 2013 Revisions that remain after the MNU and Early Queue Submittal Filings.

Some of the proposed revisions submitted with this filing were not taken through the stakeholder process. The revisions are non-substantive and were identified when the chart,

⁷ *PJM Interconnection, L.L.C.*, Revisions to PJM Tariff Regarding Merchant Network Upgrades, Docket No. ER16-757-000 (accepted by letter order issued May 6, 2016) (“MNU Filing”).

⁸ *PJM Interconnection, L.L.C.*, Early Queue Submittal Revisions, Docket No. ER16-2518-000 (accepted by letter order issued Dec. 20, 2016) (“Early Queue Submittal Filing”).

included herewith as Exhibit A, was updated or finalized.⁹ PJM does not anticipate any stakeholder objections to these revisions as they are similar to other revisions approved in the same sections.¹⁰

III. DESCRIPTION OF PROPOSED REVISIONS TO THE TARIFF

The proposed revisions are broken out into three categories: (i) ministerial clean-up, such as corrections of misspellings, grammatical and typographical errors, citation references, formatting corrections and updating section titles; (ii) revisions to incorporate language previously accepted by the Commission but inadvertently not incorporated into the Tariff; and (iii) clarifications to existing Tariff requirements. The chart in Exhibit A identifies the relevant Tariff section being revised, describes the revision, and provides the need for the proposed revision. A summary of the proposed revisions is set forth below.

A. Proposed Ministerial Revisions Regarding Misspellings, Format Changes, Grammatical Errors, Citation References, Cross References, and References to Section Titles.

As summarized below, PJM proposes to make non-substantive changes to certain Tariff sections to correct misspellings or grammatical errors, address format changes, and update citation references and section titles.

⁹ The following revisions were not presented, in whole or in part, to the stakeholders: Table of Contents, Attachment O, Specifications, §§ 4.5 and 4.6 and Attachment O, Appendix 2, §§ 4, 5 and 11 (correcting headings to conform with changes to those sections); § 36.2A.5 (added “(7)” to conform with other numbers in Part IV); Attachment N-1, § 20, Attachment N-2, § 26, Attachment N-3, § 15 (to clarify the effective date of the Agreement, which language is consistent with similar language in Attachment O, § 4.0, Attachment P, § 4.1, Attachment GG, Appendix III § 1.1); and Attachment P, Appendix 2, §§ 2.3.1, 2.3.2, 2.3.3 (removing references to MNU’s which should have been removed with revisions filed in Docket No. ER16-757-000); 3.4 (adding an “s” after “determine”); 11.1 (misspelling of “liability”); 11.5 (misspelling of “notice”); and Attachments Y and BB (to add line for printed name of signer).

¹⁰ To the extent a stakeholder objects to any of these revisions being proposed in this docket, PJM will amend the filing to withdraw those proposed revisions.

Misspellings and grammatical errors: Tariff, sections 206.3, 212.1, 213.1, 213.4(b)(1), 217.3(b); Attachment P, Appendix 2, sections 3.4 (grammatical correction), 11.1, and 11.5 are revised to correct misspellings and/or grammatical errors.

Formatting Issues: Certain citing references in Attachment O, Appendix 2, sections 13.1 and 13.1A; and Attachment P, Appendix 2, sections 11.1 and 11.1A are revised to use lower case letters. The signature blocks in Attachments Y, BB, and CC are modified to conform to all other Tariff agreements, e.g., “in witness whereof” language added to Attachment Y; space for name of parties and lines for printed name of signers are added to Attachments Y and BB; and a signature block for Transmission Provider is added to Attachment Y and CC.

Cross-references: *The following Tariff sections are modified to correct cross-references:*

(i) Sections 112A.3.1, 112A.3.2, and 112A.3.3 are revised to reference section 112A.2 rather than section 112A.1; (ii) section 216 is revised to reference the Operating Agreement, Schedule 6, section 1.5.7(h); (iii) Attachment N-1, section 3 is revised to add a reference to section 203 or 204 and to correct a reference to section 204.

Renumbering: Attachment S, sections 3.g, 3.h, 3.i, and 3.j are renumbered as subsets to section 3.f as follows: 3.g is renumbered as 3.f.i, 3.h is renumbered as 3.f.ii, 3.i is renumbered as 3.f.iii and 3.j is renumbered as 3.f.iv.

Section Titles: Attachment O, Appendix 2 is revised to correct section titles and Table of Contents. Specifically Attachment O, Appendix 2, section 4.8 is revised to remove the word “frequency” from the title and the Table of Contents is revised to conform the title to section 4.8; and Appendix 2, section 4.9 is revised to include terms “system protection” and “power quality” in the title and the Table of Contents is revised to conform the title to section 4.9. In addition, the Table of Contents is revised relative to Attachment O, Specifications, §§ 4.5 – 4.6 and

Attachment O, Appendix 2, sections 4.2, 4.4, 5.2 and 11.2 are revised to conform to changes filed with and accepted by the Commission in the MNU Filing in Docket No. ER16-757-000.¹¹

Consistency: Attachment N-2, section 13 and Attachment P, Appendix 2, section 11.1(d) are revised to remove the decimal dollar value for cents from the dollar amounts. This change is proposed to conform to other dollar and cents references in the Tariff.

B. Proposed Revisions to Incorporate Language Previously Accepted by the Commission.

PJM proposes the following revisions to incorporate Tariff language accepted by the Commission but inadvertently not incorporated into the currently effective Tariff.

The terms “New Services Queue” and “New Services Queue Closing Date” in the Definitions L-M-N section of the Tariff are modified to reflect that the time frame for interconnection queues is six months, consistent with the Tariff changes accepted in Docket No. ER12-1177-000.¹² PJM proposes to remove “of Local Upgrades and/or Network Upgrades,” in sections 212.4(b)(3), Attachment O, Appendix 2, section 11.2.1, and Attachment P, Appendix 2, section 9.1, to clarify that due to changes filed with and accepted by the Commission in Docket No. ER07-344-000, which changed Tariff invoicing from arrears to advanced quarterly payments. As a result, it is no longer necessary to restrict reduction of security to progression of construction of Local and Network Upgrades.

¹¹ See *supra* at 3, n. 7.

¹² *PJM Interconnection, L.L.C.*, 139 FERC ¶ 61,079 (2012).

C. Proposed Revisions to Clarify Existing Tariff Provisions.

PJM proposes revisions to the following sections of the Tariff to clarify existing Tariff requirements and/or delete unnecessary or confusing language. These revisions will better reflect the original intent of the provisions and reduce the possibility of misinterpretation.

The definition of “Point of Interconnection” in Definitions O-P-Q is revised to remove references to the Interconnection Service Agreement and Interconnection Construction Service Agreement. As currently defined, the term “Point of Interconnection” could be misconstrued as only applying to those interconnection agreements, which is incorrect. For example, the term Point of Interconnection also is used in and applies to the interconnection study process.

Tariff, section 36.2A.5 is revised to clarify the conditions under which the Commencement Date of an interconnection project¹³ may be extended. Specifically, the proposed revisions provide that the Commencement Date may be extended (i) after the scoping meeting once the timing for the studies is fully understood, not to exceed seven (7) years; (ii) due to study delays; or (iii) due timing of associated Network Upgrade construction. Inclusion of “(7)” was not vetted with stakeholders but was included to conform to similar number references in the Tariff.¹⁴

The following sections are modified to make clear that for an interconnection customer to retain its position in the queue, PJM must have *received* the executed study or service agreement by the stated deadlines not just that the Interconnection Customer has mailed or otherwise shipped the agreement to PJM as of the deadline date: sections 110.2, 110.3, 111.2, 111.3, 204.1, and 204.3 (System Impact Study Agreement); section 206.2 (Facilities Study Agreement);

¹³ The “Commencement Date” is defined in the Tariff to mean “the date on which Interconnection Service commences in accordance with an Interconnection Service Agreement.” *See* PJM Tariff, Definitions C-D.

¹⁴ *See supra* at 3, n. 9.

section 212.4(a) (Interconnection Service Agreement); section 212.6 (Interconnection Construction Service Agreement); and section 213.4(a) (Upgrade Construction Service Agreement).

Tariff, sections 110.4 and 111.4 are revised to remove language regarding the Interconnection Customer's and Transmission Provider's ability to agree that the Interconnection Customer could separately arrange for the design of required transmission facilities. This language is removed from these sections because such Option to Build provisions are covered in Attachment P, Appendix 2, section 3.2.3 of the Interconnection Construction Service Agreement.

Tariff, section 204.3(D) is revised to clarify that in the case of a wind generation facility the detailed electrical design specification and other data must be submitted with the System Impact Study Agreement regardless of when the Interconnection Request was submitted, as such data is necessary to perform the System Impact Study analysis.

PJM proposes to modify section 212.4(b)(iii), 213.4(b)(1)(ii) and Attachment O, Specification, section 4.6, to add the words "in earnest" to clarify that the cost estimate is based on the work to be completed in the first three months after actual work begins. The intent is to capture the estimated costs during the first three months after actual work begins.

Section 212.4(b)(2) is modified to clarify that PJM's quarterly invoices are for work conducted by the Interconnected Transmission Owner and the Transmission Provider in the subsequent three months.

Attachment N-1, section 3 is revised to add "of \$ ____." Adding a placeholder to Attachment N-1, section 3, requires the parties to agree on a specific dollar amount for the System Impact Study in the System Impact Study Agreement.

Attachment N-1, section 4 is revised to remove representation and warranty language, as Eligible Customers¹⁵ do not have to provide such representations and warranties and thus the language is unnecessary and potentially confusing.

The following sections are revised to clarify that the pertinent agreement becomes effective on the date “it is executed by all parties:” Attachment N-1, section 20.0 (System Impact Study Agreement); Attachment N-2, section 26.0 (Facilities Study Agreement); and Attachment N-3, section 15.0 (Optional Interconnection Study Agreement). This change makes clear that the agreement is not effective until the agreements are fully executed.¹⁶

Attachment N-2, section 6.2 is revised to clarify that under the Option to Build, if the Interconnection Customer were to construct a network substation and additional property is required for such construction, the Interconnection Customer must demonstrate site control of the property. This helps to ensure that the Interconnection Customer can and intends to move forward with the construction.

Attachment O, section 23.0 is revised to replace the reference to the President’s Critical Infrastructure Protection Board with the infrastructure security requirements of the North American Electric Reliability Corporation, which is the current governing body.

Attachment O, Specifications, section 4.6 is modified to add language and template instructions that make clear that the three-month project work cost and security cannot exceed 125 percent consistent with PJM Tariff, section 212.4(b), and to provide additional *pro forma*

¹⁵ See PJM Tariff, Definitions E – F.

¹⁶ See *supra* 3, n. 9. The Stakeholders approved slightly different language changes. They approved “shall be effective as of the date of both the New Service Customer’s and PJM’s execution of it.” However, PJM determined that the proposed language is more concise, accomplishes the same goal and is consistent with Commission accepted language in Attachment O, § 4.0, Attachment P, § 4.1, Attachment GG, Appendix III § 1.1.

options for when part of the security previously has been paid (e.g. pursuant to an Interim Interconnection Service Agreement).

Attachment O, Appendix 2, section 4.4 is modified to add language to alert a Transmission Interconnection Customer of its obligations as a Merchant Transmission Provider under section 38 of the Tariff. This is not a new obligation, and the additional language only ensures that a Transmission Interconnection Customer is on notice of such obligations.

Attachment O, Schedule D is modified to add a template instruction that directs the drafter of the Interconnection Service Agreement (i.e. PJM project managers) to insert the appropriate PJM and Transmission Owner technical standards into Schedule D of the agreement.

Attachment P (form of Interconnection Construction Service Agreement), Appendix 2, sections 2.3.1, 2.3.2, and 2.3.3 are revised to delete references to Merchant Network Upgrades, as such upgrades are not constructed pursuant to the Interconnection Construction Service Agreement, but rather pursuant to the Upgrade Construction Service Agreement in Attachment GG of the Tariff, as clarified in the MNU Filing in Docket No. ER16-757-000.¹⁷

Attachment P, Appendix 2, section 3.4; and Attachment GG, section 6.4 are amended to delete language that could be misinterpreted as allowing an Interconnection Customer to have three years of suspension per suspension request, rather than three total years of suspension per interconnection request. This change is consistent with Commission precedent.¹⁸

¹⁷ See *supra* at 3, n. 7.

¹⁸ See *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003-A, 2001-2005 FERC Stats. & Regs., Regs. Preambles ¶ 31,160, at P 319 (“We clarify that the Interconnection Customer has the right to ask for several suspensions of work up to a cumulative period of three years for each Interconnection Request.”), *order on reh’g*, Order No. 2003-B, 2001-2005 FERC Stats. & Regs., Regs. Preambles ¶ 31,171 (2004), *order on reh’g*, Order No. 2003-C, 2001-2005 FERC Stats. & Regs., Regs. Preambles ¶ 31,190 (2005), *aff’d sub nom. Nat’l Ass’n of Regulatory Util. Comm’rs v. FERC*, 475 F. 3d 1277 (D.C. Cir. 2007); see also *Midwest Indep. Transmission Sys. Operator, Inc.*, 120 FERC ¶ 61,293, at P 27 (2007) (“We have stated that the interconnection customer can make a single request for a three-year suspension or several requests for suspension, *if the sum of the suspensions does not exceed three years.*”).

Similarly, Attachment P, Schedule K is modified to add a template instruction that directs the drafter of the Interconnection Construction Service Agreement (i.e. PJM project managers) to insert the proper PJM and Transmission Owner technical standards into Schedule F of the agreement.

Attachment S, section 3.f is revised to delete the reference to Merchant Transmission Facilities which is consistent with revisions filed with and accepted by the Commission in PJM's MNU Filing in Docket No. ER16-757-000.¹⁹ Additionally, for clarity, PJM proposes to add an additional sentence in Attachment S, section 3.h with "yes" or "no" blocks to allow the interconnection customer who receives transmission rights for its controllable A.C. Merchant Transmission Facilities to affirmatively acknowledge whether it agrees or disagrees to operate its facilities continuously in a controllable mode.

Attachment BB is revised to require the Interconnection Customer to provide information regarding behind the meter load, including zero or none, and the unit's maximum physical export capability in kilowatts. The current form does not account for the possibility that retail load may be co-sited with this type of interconnection; however, such information is needed to accurately study the interconnection if an Attachment BB generator has behind the meter load.

D. Proposed Revision to Permit Interim Capacity Interconnection Rights

An interconnection project's Capacity Interconnection Rights ("CIRs") are valid in their base case year, i.e., the year used for the System Impact Study. If the project is able to enter service prior to its base case year, it may be entitled to receive interim CIRs. In the past, PJM has awarded interim CIRs as non-standard language to Attachment O and filed such non-standard interconnection service agreements with the Commission. PJM proposes to add language to

¹⁹ See *supra* at 3, n. 7.

Attachment O, Specifications, section 2.1 to allow PJM to award Interim CIRs to an interconnection project whose projected Initial Operation is in advance of the base case year. Allowing PJM to include such language in its Attachment O would eliminate the need for PJM to file non-conforming agreements in order allow interim CIRs. The revision proposed herein is the same language PJM has filed with and accepted by the Commission on numerous occasions.²⁰

The revision includes a template instructing the PJM project manager when to use such provision. The bracketed instruction is removed prior to issuing the agreement. In addition, the substantive revision sets forth the date the customer will be awarded CIRs and the amount to be awarded. The revisions further provides space for PJM to insert the interim time period and the amount of Capacity Interconnection Rights that may be awarded on an interim basis, the availability of and amount of which is dependent upon completion and results of an interim deliverability study. In addition, this proposal is similar to the provisional interconnection service proposed by the Commission in its Notice of Proposed Rulemaking filed in Docket No. RM17-8-000.²¹

III. REQUESTED EFFECTIVE DATE

PJM respectfully request that the proposed revisions described above and detailed in the Exhibit A table included with this filing be made effective on April 23, 2018, a date at least 60 days after the date of this filing.

²⁰ See, e.g., *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER14-1718-000 (May 13, 2014); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER13-1625-000 (July 2, 2013); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER13-322-000 (Dec. 31, 2012); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER12-912-000 (Mar. 16, 2012); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER12-123-000 (Nov. 28, 2011); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER11-4181-000 (Sept. 8, 2011).

²¹ See *Reform of Generator Interconnection Procedures and Agreements*, 157 FERC ¶ 61,212 at P 190, Docket No. RM17-8-000 (Dec. 15, 2016); see also *Reform of Generator Interconnection Procedures and Agreements*, PJM Comments, Docket No. RM17-8-000 at 25-26 (Apr. 13, 2017).

IV. DOCUMENTS ENCLOSED:

PJM encloses the following:

1. This transmittal letter;
2. Attachment A – Exhibit A – Table Listing Proposed Revisions;
3. Attachment B – Revisions to Parts IV and VI of the Tariff (in redlines); and
4. Attachment C – Revisions to Parts IV and VI of the Tariff (clean format).

V. CORRESPONDENCE AND COMMUNICATION

Correspondence and communications with respect to this filing should be sent to the following persons:

Craig Glazer
Vice President – Federal Government Policy
PJM Interconnection, L.L.C.
1200 G Street, NW, Suite 600
Washington, DC 20005
Ph: (202) 423-4743
Fax: (202) 393-7741
craig.glazer@pjm.com

Pauline Foley
Associate General Counsel
PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403
Ph: (610) 666-8248
Fax: (610) 666-8211
pauline.foley@pjm.com

VI. SERVICE

PJM has served a copy of this filing on all PJM Members and on the affected state utility regulatory commissions in the PJM Region by posting this filing electronically. In accordance with the Commission's regulations,²² PJM will post a copy of this filing to the FERC filings section of its internet site, located at the following link: <http://www.pjm.com/documents/ferc-manuals/ferc-filings.aspx> with a specific link to the newly-filed document, and will send an e-mail on the same date as this filing to all PJM Members and all state utility regulatory

²² See 18 C.F.R. §§ 35.2(e).

commissions in the PJM Region²³ alerting them that this filing has been made by PJM and is available by following such link. If the document is not immediately available by using the referenced link, the document will be available through the referenced link within twenty-four hours of the filing.

Also, a copy of this filing will be available on the Commission's eLibrary website located at the following link: <http://www.ferc.gov/docs-filing/elibrary.asp> in accordance with the Commission's regulations and Order No. 714.²⁴

Craig Glazer
Vice President – Federal Government Policy
PJM Interconnection, L.L.C.
1200 G Street, NW, Suite 600
Washington, DC 20005
Ph: (202) 423-4743
Fax: (202) 393-7741
craig.glazer@pjm.com

Respectfully submitted,

By: 
Pauline Foley
Associate General Counsel
PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403
Ph: (610) 666-8248
Fax: (610) 666-8211
pauline.foley@pjm.com

*Counsel for
PJM Interconnection, L.L.C*

²³ PJM already maintains, updates, and regularly uses electronic mailing lists for all PJM Members and affected state commissions.

²⁴ *Electronic Tariff Filings*, Order No. 714, 2008-2013 FERC Stats. & Regs., Regs. Preambles ¶ 31,276 (2008), *final rule*, Order No. 714-A, III FERC Stats. & Regs., Regs. Preambles ¶ 31,356 (2014).

Attachment A

Appendix A - Table of Changes

Revisions to Tariff Documents

Correcting Typos and Misspellings

Tariff Section	Proposed Revision	Reasons for Proposed Revisions
Table of Contents, Att. O, Specifications § 4.5-4.6	4.4 Other Charges 4.5 Cost of Merchant Network Upgrades 4.56 Cost breakdown 4.67 Security Amount Breakdown	Table of contents is updated to conform to changes made in the Tariff section.
Table of Contents, Att. O, Appendix 2 § 4, 5 and 11	Operations 4.1 General 4.2 [Reserved] Operation of Merchant Network Upgrades 4.3 Interconnection Customer Obligations 4.4 [Reserved] <u>Transmission Interconnection Customer Obligations</u> 4.5 Permits and Rights-of-Way 4.6 No Ancillary Services 4.7 Reactive Power 4.8 Under- and Over-Frequency <u>and Under- and Over-Voltage</u> Conditions 4.9 <u>System</u> Protection and System Power Quality 4.10 Access Rights 4.11 Switching and Tagging Rules 4.12 Communications and Data Protocol 4.13 Nuclear Generating Facilities 5 Maintenance 5.1 General 5.2 [Reserved] <u>Maintenance of Merchant Network Upgrades</u> 5.3 Outage Authority and Coordination Security, Billing And Payments 11.1 Recurring Charges Pursuant to Section 10 11.2 Costs for Transmission Owner Interconnection Facilities <u>and/or Merchant Network Upgrades</u> 11.3 No Waiver	Table of contents is updated to conform to changes made in the Tariff section.
Definitions L-M-N	New Services Queue: All Interconnection Requests, Completed applications, and Upgrade Requests that are received within each three-six -month period ending on January 31 , April 30 July 31 and October 31 of each year shall collectively comprise a New Services Queue.	Tariff definition was not modified when the queues were changed to six months in Docket No. ER12-1177-000.
Definitions L-M-N	New Services Queue Closing Date: Each January 31 , April 30, July 31 , and October 31	Tariff definition was not modified when the queues were changed to six months in Docket

Revisions to Tariff Documents

	shall be the Queue Closing Date for the New Services Queue comprised of Interconnection Requests, Completed Applications, and Upgrade Requests received during the three-six -month period ending on such date.	No. ER12-1177-000.
Definitions O-P-Q	<p>Point of Interconnection:</p> <p>The point or points, shown in the appropriate appendix to the Interconnection Service Agreement and the Interconnection Construction Service Agreement, where the Customer Interconnection Facilities interconnect with the Transmission Owner Interconnection Facilities or the Transmission System.</p>	The use of the term “Point of Interconnection” is not limited to the ISA or ICSA. It is a term used during the study process to describe where the Interconnection Customer’s Facilities interconnect with the Transmission Owner’s Facilities.
§36.2A.5	<p>Modification of Interconnection Request:</p> <p><u>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.</u></p>	The change clarifies the conditions under which the Commencement Date may be extended.
§110.2	<p>Feasibility Study</p> <p>In order to remain in the New Services Queue, the Interconnection Customer shall execute the must return the executed System Impact Study Agreement <u>and it must be received by the Transmission Provider</u> within <u>thirty (30) days</u>, along with documents demonstrating that an initial air permit application has been filed, if required, and the deposit contained in Section 204.3A of the Tariff.</p>	This change clarifies when the executed System Impact Study Agreement must be received by PJM in order for Interconnection Customer to retain its queue position. Under the current Tariff language, one could misinterpret the language to mean that as long as the executed agreement was shipped on the due date, the Interconnection Customer would be able to retain its queue position. This proposed clean up change clarifies any potential misinterpretation.
§110.3	<p>System Impact Study</p> <p>In order to remain in the New Services Queue, the Interconnection Customer shall execute the must return the executed-Facilities Study Agreement <u>and it must be received by the Transmission Provider</u> within <u>thirty</u></p>	This change clarifies when the executed Facilities Study Agreement must be received by PJM in order for Interconnection Customer to retain its queue

Revisions to Tariff Documents

	<p>(30) <u>days</u>, along with a deposit in the amount of the estimated cost of the Facilities Study.</p>	<p>position. Under the current Tariff language, one could interpret the language to mean that as long as the executed agreement was shipped on the due date, the Interconnection Customer would be able to retain its queue position. This proposed clean up change clarifies any potential misinterpretation.</p>
<p>§110.4</p>	<p>Facilities Study</p> <p>As with larger generation projects, transmission facilities design for any required Attachment Facilities, Local Upgrades and/or Network Upgrades will be performed through the execution of a Facilities Study Agreement between the Interconnection Customer and Transmission Provider. Transmission Provider may contract with consultants, including the Interconnected Transmission Owners, or contractors acting on their behalf, to perform the bulk of the activities required under the Facilities Study Agreement. In some cases, the Interconnection Customer and Transmission Provider may reach agreement allowing the Interconnection Customer to separately arrange for the design of some of the required transmission facilities. In such cases, facilities design will be reviewed, under the Facilities Study Agreement, by the Interconnected Transmission Owner.</p>	<p>The language was removed as it is more appropriately addressed under the Option to Build in PJM Tariff, Attachment P, Appendix 2, § 3.2.3.</p>
<p>§111.2</p>	<p>Feasibility Study</p> <p>In order to remain in the New Services Queue, the Interconnection Customer shall execute the must return the executed System Impact Study Agreement <u>and it must be received by the Transmission Provider</u> within <u>thirty (30)</u> days, along with documents demonstrating that an initial air permit application has been filed, if required, and the deposit contained in Section 204.3A of the Tariff.</p>	<p>This change clarifies when the executed System Impact Study Agreement must be received by PJM in order for Interconnection Customer to retain its queue position. Under the current Tariff language, one could interpret the language to mean that as long as the executed agreement was shipped on the due date, the Interconnection Customer would be able to retain its queue position. This</p>

Revisions to Tariff Documents

		proposed clean up change clarifies any potential misinterpretation.
§111.3	<p>System Impact Study</p> <p>In order to remain in the New Services Queue, the Interconnection Customer shall execute the must return the executed Facilities Study Agreement <u>and it must be received by the Transmission Provider</u> within <u>thirty (30)</u> days, along with a deposit in the amount of the estimated cost of the Facilities Study.</p>	This change clarifies when the executed Facilities Study Agreement must be received by PJM in order for Interconnection Customer to retain its queue position. Under the current Tariff language, one could interpret the language to mean that as long as the executed agreement was shipped on the due date, the Interconnection Customer would be able to retain its queue position. This proposed clean up change clarifies any potential misinterpretation.
§111.4	<p>Facilities Study</p> <p>As with larger generation projects, transmission facilities design for any required Attachment Facilities, Local Upgrades and/or Network Upgrades will be performed through the execution of a Facilities Study Agreement between the Interconnection Customer and Transmission Provider. Transmission Provider may contract with consultants, including the Interconnected Transmission Owners, or contractors acting on their behalf, to perform the bulk of the activities required under the Facilities Study Agreement. In some cases, the Interconnection Customer and Transmission Provider may reach agreement allowing the Interconnection Customer to separately arrange for the design of some of the required transmission facilities. In such cases, facilities design will be reviewed, under the Facilities Study Agreement, by the Interconnected Transmission Owner.</p>	The language was removed as it is more appropriately address under the Option to Build in PJM Tariff, Attachment P, Appendix 2, § 3.2.3.
§112A.3.1	<p>Results of Screens</p> <p>If the proposed interconnection passes the screens set forth in section 112A.1<u>112A.2</u> of this Tariff, the</p>	Incorrect reference to Tariff section regarding small generator interconnection

Revisions to Tariff Documents

	<p>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.</p>	<p>screens.</p>
<p>§112A.3.2</p>	<p>Results of Screens</p> <p>If the proposed interconnection of the Energy Resource fails the screens set forth in section 112A.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.</p>	<p>Incorrect reference to Tariff section regarding small generator interconnection screens.</p>
<p>§112A.3.3</p>	<p>Results of Screens</p> <p>If the proposed interconnection of the Energy Resource fails the screens set forth in section 112A.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.</p>	<p>Incorrect reference to Tariff section regarding small generator interconnection screens.</p>

Revisions to Tariff Documents

<p>§204.1</p>	<p>Completed Applications:</p> <p>For a Completed Application to retain its Queue Position, the Eligible Customer (i) shall execute the System Impact Study Agreement and <u>it must be received by</u> return it to the Transmission Provider within thirty (30) days....</p>	<p>This change clarifies when the executed System Impact Study Agreement must be received by PJM in order for Interconnection Customer to retain its queue position. Under the current Tariff language, one could misinterpret the language to mean that as long as the executed agreement was shipped on the due date, the Interconnection Customer would be able to retain its queue position. This proposed clean up change clarifies any potential misinterpretation.</p>
<p>§204.3</p>	<p>Interconnection Requests:</p> <p>Upon completion of the Interconnection Feasibility Study, the Transmission Provider shall tender to the affected Interconnection Customer a System Impact Study Agreement. For an Interconnection Request to retain its assigned Queue Position pursuant to Section 201, within 30 days of receiving the tendered System Impact Study Agreement, the Interconnection Customer (i) shall execute the System Impact Study Agreement and <u>it must be received by</u> return it to the Transmission Provider</p> <p>(D) in the case of a wind generation facility, provide a detailed electrical design specification and other data (including system layout data) as required by the Transmission Provider for completion of the System Impact Study no later than 6 months after submission of the Generation Interconnection Request, and . . .</p>	<p>This change clarifies when the executed System Impact Study Agreement must be received by PJM in order for Interconnection Customer to retain its queue position. Under the current Tariff language, one could interpret the language to mean that as long as the executed agreement was shipped on the due date, the Interconnection Customer would be able to retain its queue position. This proposed clean up change clarifies any potential misinterpretation.</p> <p>(D) The proposed change clarifies that data must be submitted with the System Impact Study Agreement regardless of when the queue request was made.</p>

Revisions to Tariff Documents

<p>§206.2</p>	<p>Retaining Queue Position:</p> <p>For a New Service Request to retain its assigned Queue Position pursuant to Section 201, a New Service Customer must, within 30 days of <u>issuing the System Impact Study, the Transmission Provider must be in receipt of the Facilities Study Agreement,</u> (i) remit to Transmission Provide-all past due amounts of the actual System Impact Study costs exceeding the System Impact Study deposits contained in Section 204.3A, if any, and (ii) the executed and return the Facilities Study Agreement and, (iii) <u>the deposit required under this Section 206 to the Transmission Provider.</u> If a participating New Service Customer fails to remit past due amounts, execute the Facilities Study Agreement or to pay the deposit required under this Section 206, its New Service Request shall be deemed terminated and withdrawn.</p>	<p>This change clarifies when the executed Facilities Study Agreement must be received by PJM in order for New Service Customer to retain its queue position. Under the current Tariff language, one could misinterpret the language to mean that as long as the executed agreement was shipped on the due date, the New Service Customer would be able to retain its queue position. This proposed clean up change clarifies any potential misinterpretation.</p>
<p>§206.3</p>	<p>Deposit:</p> <p>Notwithstanding the foregoing, for an Interconnection Customer with a proposed Customer Facility that is: (a) equal to or less than 20 MW but greater than 2 MW shall pay a refundable deposit in the amount of \$50,000; or (b) equal to or less than 2 MW shall pay a refundable deposit <u>deposit</u> in the amount of \$15,000.</p>	<p>Correct misspelling of “Deposit.”</p>
<p>§212.1</p>	<p>Cost Reimbursement:</p> <p>Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activies <u>activities</u> to satisfy itself that the Interconnection Customer is complying with the Transmission Owner’s standards...</p>	<p>Correct misspelling of “Activities.”</p>

Revisions to Tariff Documents

<p>§212.4</p>	<p>Retaining Priority and Security:</p> <p>(a) To retain assigned Queue Position of its Interconnection Request pursuant to Section 201, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the Interconnection Customer must have executed and return the tendered Interconnection Service Agreement <u>and it must be in the possession of</u> to the Transmission Provider or, alternatively, request (i) dispute resolution under Section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or (ii) that the Interconnection Service Agreement be filed unexecuted with the Commission.</p> <p>(b)... (iii) the estimated cost of the work that the Transmission Owner will be responsible for performing on the required Attachment Facilities, Direct Connection Local Upgrades, and Direct Connection Network Upgrades that are scheduled to be completed during the first three months after such work commences <u>in earnest</u>, or...</p> <p>(2) Transmission Provider shall invoice Interconnection Customer for work by the Interconnected Transmission Owner <u>and Transmission Provider</u> on a quarterly basis for the costs to be expended in the subsequent three months. . . .</p> <p>(3) Transmission Provider shall hold the security related to construction of Attachment Facilities until <u>as-built drawings are received and</u> settlement of the final invoice; security related to construction of Local Upgrades and/or Network Upgrades may be reduced as construction progresses.</p>	<p>(a) This change clarifies when the executed Interconnection Service Agreement must be received by PJM in order for Interconnection Customer to retain its queue position. Under the current Tariff language, one could misinterpret the language to mean that as long as the executed agreement was shipped on the due date, the Interconnection Customer would be able to retain its queue position. This proposed clean up change clarifies any potential misinterpretation.</p> <p>(b)(iii) The addition of the words “in earnest” clarifies that the cost estimate is based on the work to be completed in the first three months after the actual work begins.</p> <p>(b)(2) Addition of Transmission Provider clarifies that the invoice includes any work by Interconnected Transmission Owner and Transmission Provider.</p> <p>(b)(3) The proposed change clarifies that security related to construction is held until completion of construction, i.e., “until as-built drawings are received and settlement of final invoice.” However, due to changes filed with and accepted by the Commission in Docket No. ER07-344-000, which changed Tariff invoicing from arrears to advanced quarterly payments, it was no longer necessary to restrict reduction of</p>
---------------	---	---

Revisions to Tariff Documents

		security to progression of construction of Local Upgrades and Network Upgrades.
§212.6	<p>Interconnection Construction Service Agreement and Commencement of Construction:</p> <p>Within ninety (90) calendar days of receipt thereof, unless otherwise specified in the project specific milestones of the Interconnection Service Agreement, Interconnection Customer either shall either have executed and return the <u>tendered</u> Interconnection Construction Service Agreement <u>and it must be in possession of</u> to the Transmission Provider, or, alternatively, shall request dispute resolution under Section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or that the Interconnection Construction Service Agreement be filed unexecuted with the Commission.</p>	This change clarifies when the executed Interconnection Construction Service Agreement must be received by PJM in order for Interconnection Customer to retain its queue position. Under the current Tariff language, one could misinterpret the language to mean that as long as the executed agreement was shipped on the due date, the Interconnection Customer would be able to retain its queue position. This proposed clean up change clarifies any potential misinterpretation.
§213.1	<p>Upgrade Construction Service Agreement, Cost Reimbursement:</p> <p>Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities <u>activities</u> to satisfy itself that the New Service Customer is complying with the Transmission Owner’s standards...</p>	Correct misspelling of “activities.”
§213.4(a) and (b)	<p>Retaining Priority and Security:</p> <p>To retain the assigned Queue Position of its New Service Request pursuant to Section 201, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the New Service Customer either shall have must executed and return the tendered Upgrade Construction Service Agreement <u>and it must be in possession of</u> to the Transmission Provider or, alternatively, request (i) dispute resolution under Section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule</p>	(a) This change clarifies when the executed Upgrade Construction Service Agreement must be received by PJM in order for New Service Customer to retain its queue position. Under the current Tariff language, one could misinterpret the language to mean that as long as the executed agreement was shipped on the due date, the New Service Customer would be

Revisions to Tariff Documents

	<p>5 of the Operating Agreement...</p> <p>(ii) the estimated cost of work that the New Service Customer will be responsible for performing on the required Direct Assignment Facilities, Direct Connection Local Upgrades, and/or Direct Connection Network Upgrades that are scheduled to be completed during the first three months after such work commences <u>in earnest</u>, and</p> <p>Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities <u>activities</u> to satisfy itself that the New Service Customer is complying with the when engaging in oversight actives to satisfy itself that the New Service Customer is complying with the Transmission Owner’s standards...</p>	<p>able to retain its queue position. This proposed clean up change clarifies any potential misinterpretation.</p> <p>(b)(1)(ii) The addition of the words “in earnest” clarifies that the cost estimate is based on the work to be completed in the first three months after the actual work begins.</p> <p>(b)(1) Correct misspelling of “activities.”</p>
<p>§216</p>	<p>Interconnection Requests Designated as Market Solutions:</p> <p>The provisions of this section shall apply to an Interconnection Request related to a project that Transmission Provider determines, in accordance with Section 1.5.7(h) of Schedule 6 of the Operating Agreement could relieve a transmission constraint and which, in the judgment of the Transmission Provider, is economically (hereafter, a “market solution”).</p>	<p>Correct incorrect reference to Schedule 6 of the Operating Agreement.</p>
<p>§217.3(b)</p>	<p>Local and Network Upgrades:</p> <p>Where the New Service Request calls for accelerating the construction of a Local Upgrade or Network Upgrade that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the New Service Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion <u>Expansion</u> Plan but for the acceleration of the construction of the upgrade.</p>	<p>Correct misspelling of “Expansion.”</p>

Revisions to Tariff Documents

<p>Attachment N-1, §3</p>	<p>Form of System Impact Study Agreement:</p> <p>Pursuant to Sections 19.1, 32.1, 37, 110.2, 111.2, 204.1, 204.2, or 204.3, as applicable, of the PJM Tariff, the New Service Customer (i) requests that the Transmission Provider perform a System Impact Study, and (ii) agrees to submit a deposit <u>of \$ _____</u> to the Transmission Provider which will be applied to the New Service Customer’s cost responsibility for the System Impact Study, as set forth in Section 203 or 204.3A of the PJM Tariff.</p>	<p>Add relevant cross-references sections 204.1 and 203 and correct reference to section 204.</p> <p>Add “of \$” to clarify the use of the term deposit.</p>
<p>Attachment N-1, §4</p>	<p>Form of System Impact Study Agreement:</p> <p>Except as otherwise specifically set forth in an attachment to this agreement, New Service Customer represents and warrants that the information provided in Section ___ [insert applicable section number] of the New Service Request dated ____, for the request designated ___ [insert Queue Position] is accurate and complete as of the date of execution of this System Impact Study Agreement. New Service Customer further provides the following information and represents and warrants that said information is true and correct:</p>	<p>Removes representation and warranty language as it is not required for Eligible Customers.</p>
<p>Attachment N-1, §20</p>	<p>Form of System Impact Study Agreement:</p> <p>This System Impact Study Agreement shall be <u>come</u> effective on the date it is executed by all parties as of the date the New Service Customer’s execution of it and shall remain in effect until the earlier of (a) the date on which the Transmission Provider tenders the completed System Impact Study and a proposed Facilities Study Agreement to New Service Customer pursuant to Section 206 of the PJM Tariff, or (b) termination and withdrawal of the New Service Request(s) to which the System Impact Study hereunder relates.</p>	<p>This change is slightly different than what was approved by the stakeholders. The modification was made to clarify that all signatures are required for the effective date. This change is consistent with the language used in the ISA, ICSA and Upgrade CSA. The change approved by stakeholders is as follows:</p> <p>This System Impact Study Agreement shall be effective as of the date <u>of both</u> the New Service Customer’s <u>and PJM’s</u> execution of it and shall remain in effect until</p>

Revisions to Tariff Documents

<p>Attachment N-2, §6.2</p>	<p>Form of Facilities Study Agreement:</p> <p>To the extent New Service Customer intends to elect the Option to Build as provided in Appendix 2 to Attachment P of the Tariff, and to the extent any new or additional property is required to accommodate required Attachment Facilities <u>and/or network substation</u>, on or before ____, New Service Customer must provide evidence of an ownership interest in, or right to acquire or control the location which shall be the location of the network substation which shall be built and subsequently transferred to the Interconnected Transmission Owner. The evidence of site control shall be a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider.</p>	<p>Under Option to Build, Interconnection Customer would construct network substation and would require property to do so.</p> <p>This change clarifies that the New Service Customer must demonstrate site control for new or additional property required for Attachment Facilities and/or network substation to help ensure New Service Customer can and intends to move forward with construction.</p>
<p>Attachment N-2, §13</p>	<p>Form of Facilities Study Agreement:</p> <p>Concurrent with execution of this Agreement, New Service Customer will pay Transmission Provider a cash deposit, as provided by Section 206 of the PJM Tariff, equal to the greater of \$100,000.00 or New Service Customer's estimated cost responsibility for the first three months of work on the Facilities Study.</p>	<p>Correct inconsistency: The reference to "cents" was removed to be consistent with other dollars and cents references.</p>
<p>Attachment N-2, §26</p>	<p>Form of Facilities Study Agreement:</p> <p>This Facilities Study Agreement shall <u>become</u> effective <u>on the date it is executed by all parties as of the date the New Service Customer's execution of it</u> and shall remain in effect until the earlier of (a) the date on which the Transmission Provider tenders the completed Facilities Study and, as applicable, a proposed Interconnection Service Agreement or Upgrade Construction Service Agreement to New Service Customer pursuant to Section 212 or 213, respectively, of the PJM Tariff, or (b) termination and withdrawal of the New Service Request(s) to which the Facilities Study hereunder relates.</p>	<p>This change is slightly different than what was approved by the stakeholders. The modification was made to clarify that all signatures are required for the effective date. This change is consistent with the language used in the ISA, ICSA and Upgrade CSA. The change approved by stakeholders is as follows:</p> <p>This Facilities Study Agreement shall be effective as of the date <u>of both</u> the New Service Customer's <u>and PJM's</u> execution of it and shall remain in effect until . . .</p>
<p>Attachment N-3, § 15</p>	<p>Form of Optional Interconnection Study Agreement:</p>	<p>This change is slightly different than what was approved by the</p>

Revisions to Tariff Documents

	<p>This Optional Interconnection Study Agreement shall become effective <u>on the date it is executed by all parties as of the date the New Service Customer's execution of it</u> and shall remain in effect until the earlier of (a) completion and final payment for the Optional Interconnection Study or (b) termination and withdrawal of the Interconnection Request(s) to which the Optional Interconnection Study hereunder relates.</p>	<p>stakeholders. The modification was made to clarify that <i>all</i> signatures are required for the effective date. This change is consistent with the language used in the ISA, ICSA and Upgrade CSA. The change approved by stakeholders is as follows:</p> <p>This Facilities Study Agreement shall be effective as of the date <u>of both</u> the New Service Customer's <u>and PJM's</u> execution of it and shall remain in effect until . . .</p>
<p>Attachment O, § 23.0</p>	<p>Form of Interconnection Service Agreement:</p> <p>Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All Transmission Providers, Interconnected Transmission Owners, market participants, and Interconnection Customers interconnected with electric systems are to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber security practices. All interconnection parties agree to comply with all infrastructure security requirements of the North American Electric Reliability Corporation.</p>	<p>Updating language on infrastructure security to reference correct governing body.</p>
<p>Attachment O, Specifications §2.1</p>	<p>Capacity Interconnection Rights:</p> <p>{include the following language when the projected Initial Operation is in advance of the study year used for the System Impact Study and Capacity Interconnection Rights are only interim until the study year: }</p> <p><u>Pursuant to and subject to the applicable terms of the</u></p>	<p>PJM proposes to include this language in Attachment O, Specifications § 2.1, which language has been submitted in numerous interconnection service agreements filed as non-conforming with and accepted by the Commission. This</p>

Revisions to Tariff Documents

	<p><u>Tariff, the Interconnection Customer shall have Capacity Interconnection Rights at the Point(s) of Interconnection specified in this Interconnection Service Agreement in the amount of ___ MW commencing _____. During the time period from the effective date of this Interconnection Service Agreement until ____ (the “interim time period”), the Interconnection Customer may be awarded interim Capacity Interconnection Rights in an amount not to exceed ___ MW. The availability and amount of such interim Capacity Interconnection Rights shall be dependent upon completion and results of an interim deliverability study. Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on _____.</u></p>	<p>provision permits an Interconnection Customer to receive interim capacity interconnection rights depending upon the results of an interim deliverability study.</p> <p><i>See, e.g., PJM Interconnection, L.L.C., Letter Order, Docket No. ER14-1718-000 (May 13, 2014); PJM Interconnection, L.L.C., Letter Order, Docket No. ER13-1625-000 (July 2, 2013); PJM Interconnection, L.L.C., Letter Order, Docket No. ER13-322-000 (Dec. 31, 2012); PJM Interconnection, L.L.C., Letter Order, Docket No. ER12-912-000 (Mar. 16, 2012); PJM Interconnection, L.L.C., Letter Order, Docket No. ER12-123-000 (Nov. 28, 2011); PJM Interconnection, L.L.C., Letter Order, Docket No. ER11-4181-000 (Sept. 8, 2011).</i></p>
<p>Attachment O, Specifications §4.6</p>	<p>ISA, Security Amount Breakdown:</p> <p>plus \$ Estimated cost of the work (for the first three months <u>after construction commences in earnest</u>) on the required Attachment Facilities, Direct Connection Local Upgrades, and Direct Connection Network Upgrades</p> <p>Plus \$ Option to Build Security for Attachment Facilities, Direct Connection Local Upgrades, and Direct Connection Network Upgrades (including Cancellation Costs)</p> <p><u>{Use if Interconnection Transmission Owner work will be completed in first quarter:</u></p> <p><u>\$ _____ Costs included for three-month completion estimate Security x 0.25 }</u></p> <p><u>\$ _____ Total Security required by ISA (this value should</u></p>	<p>The addition of the words “in earnest” clarifies that the cost estimate is based on the work to be completed in the first three months after the actual work begins.</p> <p>This proposed change addresses the Tariff requirement at section 212.4(b) which provides that if the work is to be completed in three-months or less, Transmission Provider must collect security in the amount of 125% of the estimated cost of the project.</p> <p>This proposed change also addresses issues stemming from</p>

Revisions to Tariff Documents

	<p><u>be in Section 5.0 of this ISA)</u></p> <p>less \$___Costs already paid by Interconnection Customer</p> <p>\$___Total Security <u>{if the resultant is negative, use: reduction with this ISA; if the resultant is zero or positive use: required with this ISA}</u></p>	Interim ISAs when part of the security previously has been paid.
Attachment O, Appendix 2, § 4.4	<p>4.4 [Reserved.] <u>Transmission Interconnection Customer Obligations:</u></p> <p><u>A Transmission Interconnection Customer that will be a Merchant Transmission Provider is subject to the terms and conditions in Tariff, Section 38.</u></p>	Adding this language to §4.4 alerts the Merchant Transmission Customer of its obligations under §38.
Attachment O, Appendix 2, § 4.8	Under- and Over-Frequency and Under- and Over- Frequency Voltage Conditions:	Correct the section title.
Attachment O, Appendix 2, § 4.9	System Protection and System-Power Quality	Correct the section title
Attachment O, Appendix 2, §11.2.1	<p>ISA, Adjustments to Security:</p> <p>The Security provided by Interconnection Customer at or before execution of the Interconnection Service Agreement (a) shall be reduced as portions of the work on required Local Upgrades and/or Network Upgrades <u>is</u>are completed, and/or (b) shall be increased or decreased as required to reflect adjustments to Interconnection Customer’s cost responsibility, as determined in accordance with Section 217, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider’s scope change process for interconnection projects set forth in the PJM Manuals.</p>	Due to changes filed with and accepted by the Commission in Docket No. ER07-344-000, which changed Tariff invoicing from arrears to advanced quarterly payments, it was no longer necessary to restrict reduction of security to progression of construction of Local Upgrades and Network Upgrades.
Attachment O, Appendix 2, § 13.1	<p>Required Coverages for Generation Resources of More Than 20 Megawatts or Merchant Transmission Facilities:</p> <p>Each Interconnected Entity shall maintain insurance as</p>	Correct format for consistency in numbering Tariff sections.

Revisions to Tariff Documents

	<p>described in paragraphs (a)A through (e)E below.</p> <p>A(a) Workers Compensation insurance with statutory limits, as required by the state and/or jurisdiction in which the work is to be performed, and employer's liability insurance with limits of not less than one million dollars (\$1,000,000.00).</p> <p>B(b) Commercial General Liability Insurance</p> <p>C(c) Comprehensive Automobile Liability Insurance</p> <p>D(d) Excess/Umbrella Liability Insurance with a limit of liability of not less than twenty million dollars (\$20,000,000.00) per occurrence. These limits apply in excess of the employer's liability, commercial general liability and business/commercial automobile liability coverages described above.</p> <p>E(e) Professional Liability Insurance</p> <p>... Interconnection Facilities necessary for the interconnection to procure professional liability insurance in the amounts and upon the terms prescribed by this section 13.1(eE), and providing evidence of such insurance to the other Interconnected Entity.</p>	
<p>Attachment O, Appendix 2, §13.1A</p>	<p>Required Coverages for Generation Resources of 20 Megawatts or Less:</p> <p>Each Interconnected Entity shall maintain the types of insurance as described in section 13.1 paragraphs A(a) through E(e) in an amount sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made.</p>	<p>Revisions necessary due to format corrections in Attachment O, Appendix 2, § 13.1 above.</p>
<p>Attachment O, Schedule D</p>	<p>Applicable Technical Requirements and Standards:</p> <p>Add instruction: <u>[Reference the appropriate PJM and TO technical standards]</u></p>	<p>Add instructions for PJM project managers to insert proper language. Bracketed instruction is removed prior to issuing ISA.</p>
<p>Attachment P, Appendix</p>	<p>Construction Prior to Execution of Interconnection Construction Service Agreement:</p>	<p>PJM proposes to remove references to a Merchant Network Upgrade in the ICSA</p>

Revisions to Tariff Documents

2, §2.3.1	<p>If the Interconnection Customer procures materials for, and/or commences construction of, the Customer Interconnection Facilities, any Transmission Owner Interconnection Facilities, or any Merchant Network Upgrades that it has elected to construct by exercising the Option to Build under Section 3.2.3 of this Appendix 2, Interconnection Construction Service Agreement or, if the Interconnection Construction Service Agreement has been executed, before the Interconnected Transmission Owner and Transmission Provider have accepted the Interconnection Customer's initial design, or any subsequent modification to the design, of such Interconnection Facilities and/or Merchant Network Upgrades, such procurement and/or construction shall be at the Interconnection Customer's sole risk, cost and expense.</p>	<p>because Merchant Network Upgrades are addressed in an Upgrade CSA. This change is consistent with changes filed with and accepted by the Commission in Docket No. ER16-757-000.</p>
Attachment P, Appendix 2, § 2.3.2	<p>Monitoring and Inspection:</p> <p>The Interconnected Transmission Owner may monitor construction and installation of Interconnection Facilities and/or Merchant Network Upgrades that the Interconnection Customer is constructing. Upon reasonable notice, authorized personnel of the Interconnected Transmission Owner may inspect any or all of such Interconnection Facilities and/or Merchant Network Upgrades to assess their conformity with Applicable Standards.</p>	<p>PJM proposes to remove references to a Merchant Network Upgrade in the ICSCA because Merchant Network Upgrades are addressed in an Upgrade CSA. This change is consistent with changes filed with and accepted by the Commission in Docket No. ER16-757-000.</p>
Attachment P, Appendix 2, § 2.3.3	<p>Notice of Completion:</p> <p>The Interconnection Customer shall notify the Transmission Provider and the Interconnected Transmission Owner in writing when it has completed construction of (i) the Customer Facility; (ii) the Customer Interconnection Facilities; and (iii) any Transmission Owner Interconnection Facilities and/or any Merchant Network Upgrades for which it has exercised the Option to Build under Section 3 of this Appendix 2.</p>	<p>PJM proposes to remove references to a Merchant Network Upgrade in the ICSCA because Merchant Network Upgrades are addressed in an Upgrade CSA. This change is consistent with changes filed with and accepted by the Commission in Docket No. ER16-757-000.</p>
Attachment P, Appendix 2, § 3.4	<p>ICSA, Suspension:</p> <p>This suspension right permits the Interconnection Customer to request one or more suspensions of work for a cumulative period of up to three years for each</p>	<p>The deleted language is intended to clarify language in this section that could be interpreted to mean that an Interconnection</p>

Revisions to Tariff Documents

	<p>Interconnection Request.</p> <p>This suspension right permits the Interconnection Customer to request one or more suspensions of work for a cumulative period of up to (i) three years for an Interconnection Request for which if the Transmission Provider determines that such suspension would not be deemed a Material Modification, or (ii) one year for an Interconnection Request for which if the Transmission Provider determines that such suspension would be deemed a Material Modification.</p>	<p>Customer may have three years per suspension request. That interpretation was not intended. An Interconnection Customer may suspend its project for no more than a cumulative period of up to three years unless a suspension could be deemed a Material Modification.</p> <p>The following grammatical correction was not vetted through the stakeholder process: Add an “s” after determine.</p>
<p>Attachment P, Appendix 2, §9.1</p>	<p>ICSA, Adjustments to Security:</p> <p>The Security provided by Interconnection Customer at or before execution of the Interconnection Service Agreement (a) shall be reduced as portions of the work on required Local Upgrades and/or Network Upgrades is are completed, and/or (b) shall be increased or decreased as required to reflect adjustments to Interconnection Customer’s cost responsibility, as determined in accordance with Section 217, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider’s scope change process for interconnection projects set forth in the PJM Manuals.</p>	<p>Due to changes filed with and accepted by the Commission in Docket No. ER07-344-000, which changed Tariff invoicing from arrears to advanced quarterly payments, it was no longer necessary to restrict reduction of security to progression of construction of Local Upgrades and Network Upgrades.</p>
<p>Attachment P, Appendix 2, §11.1</p>	<p>Required Coverages for Generation Resources of More Than 20 Megawatts or Merchant Transmission Facilities:</p> <p>Each Constructing Entity shall maintain, at its own expense, insurance as described in paragraphs A-(a) through E-(e) below. All insurance shall be procured from insurance companies rated “A-,” VII or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities will be located. Failure to maintain required insurance shall be a Breach of the Interconnection Construction Service Agreement.</p> <p>A-(a) Workers Compensation Insurance</p>	<p>Correct format for consistency in numbering Tariff sections.</p> <p>Correct misspelling of “liability.”</p> <p>(d) The reference to cents was removed from \$20,000,000 to conform to other dollars and cents references in the Tariff.</p>

Revisions to Tariff Documents

	<p>B- <u>(b)</u> Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising , products and completed operations coverage, independent contractors coverage, liability-liability assumed under an insured contract, coverage for pollution to the extent normally available and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) products and completed operations aggregate.</p> <p>C- <u>(c)</u> Comprehensive Automobile Liability Insurance</p> <p>D- <u>(d)</u> Excess and/or Umbrella Liability Insurance with a limit of liability of twenty million dollars (\$20,000,000-00) per occurrence. These limits apply in excess of the employer’s liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or via a combination of primary, excess and/or umbrella insurance.</p> <p>E- <u>(e)</u> Professional Liability Insurance...An Interconnected Entity may meet the Professional Liability Insurance requirements by requiring third-party contractors, designers, or engineers, or other parties that are responsible for design work associated with the transmission facilities or Interconnection Facilities necessary for the interconnection to procure professional liability insurance in the amounts and upon the terms prescribed by this section 11.1(eE), and providing evidence of such insurance to the other Interconnected Entity.</p>	
<p>Attachment P, Appendix 2, §11.1A</p>	<p>Required Coverages for Generation Resources of 20 Megawatts or Less:</p> <p>Each Interconnected Entity shall maintain the types of insurance as described in section 11.1 paragraphs A-(a) through E-(e) in an amount sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the</p>	<p>Revisions necessary due to format corrections in Attachment O, Appendix 2, § 11.1 above.</p>

Revisions to Tariff Documents

	characteristics of the system to which interconnection is made.	
Attachment P, Appendix 2, § 11.5	... If the policies of insurance do not or cannot be endorsed to provide thirty days prior written ntoiee <u>notice</u> of cancellation or material adverse change, each Construction Entity shall provide the other Construction Entities with thirty days prior written notice of cancellation or material adverse change to any of the insurance required in this agreement.	Correct the misspelling of “notice.”
Attachment P, Schedule K	Applicable Technical Requirements and Standards: Add instruction: <u>[Reference the appropriate PJM and TO technical standards]</u>	Add template instructions for PJM project managers to insert the appropriate PJM and Interconnected Transmission Owner standards into Schedule D. Bracketed instruction is removed prior to issuing ICSA.
Attachment S, §3.f.	(1) Are these proposed Merchant Transmission Facilities? ___ Yes ___ No (2) If Yes, w Will the proposed facilities be Merchant A.C. or Merchant D.C. Transmission Facilities or Controllable A.C. Merchant Transmission Facilities? A.C. ___ or D.C. ___ or Controllable A.C. ___ does Interconnection elect to receive:	The proposed change eliminates the reference to Merchant Transmission Facilities in Attachment S, consistent with the Merchant Network Upgrade filing submitted with and accepted by the Commission in Docket No. ER16-757-000.
Attachment S, §3.g.	Renumber 3.g. to <u>3.f.i.</u> If the proposed facilities will be Merchant D.C. Transmission Facilities, does Interconnection Customer elect to receive:	Renumbering because these questions should be subsets of § 3.f.
Attachment S, §3.h.	Renumber 3.h. to <u>3.f.ii.</u> If the proposed facilities will be Controllable A.C. Merchant Transmission Facilities, and provided that Interconnection Customer contractually binds itself in the Interconnection Service Agreement (“ISA”) related to its project always to operate its Controllable A.C. Merchant Transmission Facilities in a manner effectively the same as operation of D.C. transmission facilities, the ISA will provide Interconnection Customer with the same types of transmission rights that are available under the Tariff for Merchant D.C. Transmission Facilities. For purposes of this Feasibility Study Agreement, Interconnection Customer represents that, should it	Renumbering because these questions should be subsets of § 3.f. For clarity, PJM proposes to include an additional sentence with yes or no blocks to allow customer to acknowledge agreement or disagreement.

Revisions to Tariff Documents

	<p>execute an ISA for its project described herein, it will agree in the ISA to operate its facilities continuously in a controllable mode.</p> <p><u>Interconnection Customer agrees?</u></p> <p><u> Yes No</u></p> <p>iv. Other information:</p>	
Attachment S, §3.i.	<p>Renumber 3.i to <u>3.f. iii</u>. If the proposed facilities will be Merchant A.C. Transmission Facilities without continuous controllability as described in paragraph 3.h.f.ii above, please specify the location on the Transmission System where Interconnection Customer proposes to receive any Incremental Deliverability Rights associated with its proposed facilities:</p>	Renumbering because these questions should be subsets of § 3.f.
Attachment S, §3.j.	<p>Renumber 3.j to <u>3.f.iv</u>. Other information.</p>	Renumbering because these questions should be subsets of § 3.f.
Attachment Y	<p>Form of Screens Process Interconnection Request (For Generation Facilities of 2MW or Less):</p> <p><u>IN WITNESS WHEREOF, the Transmission Provider and the Interconnection Customer have caused this Screens Process Interconnection Request Agreement to be executed by their respective authorized officials.</u></p> <p><u>Transmission Provider; PJM Interconnection, L.L.C.</u></p> <p>By: _____ Name Title Date</p> <p>_____ <u>Printed name of signer</u></p> <p>Interconnection Customer: <u>[Name of Party]</u></p> <p>By: _____ Name Title Date</p> <p>_____ <u>Printed name of signer</u></p>	<p>The addition of the “in witness whereof” block is to conform Attachment Y to all other study agreements.</p> <p>In addition, PJM added a signature block for PJM and added lines to allow each signer to print his or her name. These changes conform to other study agreements in the Tariff.</p>
Attachment BB §3.0	<p>Form of Interconnection Service Agreement for Certified Inverter-based Generating Facility:</p>	Add a request for information regarding behind the meter load and actual export capability.

Revisions to Tariff Documents

	<p>Is the equipment UL1741 Listed?</p> <p>Yes__ No__</p> <p>If Yes, attach manufacturer's cut-sheet showing UL1741 listing</p> <p><u>Interconnection Customer or Customer-Site Load</u> <u> kW (zero, if none)</u></p> <p><u>Maximum Physical Export Capability Requested:</u> <u> kW</u></p> <p>Estimated Installation Date:__ Estimated In-Service Date __</p>	
<p>Attachment BB, signature block</p>	<p>Transmission Provider: <u>PJM Interconnection, L.L.C.</u></p> <p>By: _____ Name Title Date</p> <p>_____ <u>Printed name of signer</u></p> <p>Interconnection Customer: <u>[Name of Party]</u></p> <p>By: _____ Name Title Date</p> <p>_____ <u>Printed name of signer</u></p> <p>Interconnected Transmission Owner: <u>[Name of Party]</u></p> <p>By: _____ Name Title Date</p> <p>_____ <u>Printed name of signer</u></p>	<p>Add lines in signature blocks for printed names of signer consistent with other study agreements in the Tariff.</p> <p>Add PJM Interconnection, L.L.C. and instructions next to each party to provide for inclusion of each party's name.</p>
<p>Attachment CC</p>	<p>Form of Certificate of Completion:</p> <p>Transmission Provider</p> <p><u>By:</u> _____ <u>Name</u> Title Date</p> <p>_____ <u>Printed name of signer</u></p>	<p>Add signature line for PJM. This change conforms to other study agreements in the Tariff.</p>
<p>Attachment GG, §6.4</p>	<p>UCSA, Suspension:</p> <p>This suspension right permits the New Service Customer to request one or more suspensions of work for a cumulative period of up to three years for each</p>	<p>The deleted language is intended to clarify language in this section that could be interpreted to mean that an Interconnection Customer may have three years</p>

Revisions to Tariff Documents

	<p>request.</p> <p>This suspension right permits the New Service Customer to request one or more suspensions of work for a cumulative period of up to (i) three years for a request for which <u>if</u> the Transmission Provider determines that such suspension would not be deemed a Material Modification, or (ii) one year for a request for which <u>if</u> the Transmission Provider determines that such suspension would be deemed a Material Modification.</p>	<p>per suspension request. That interpretation was not intended. An Interconnection Customer may suspend its project for no more than a cumulative period of up to three years unless a suspension could be deemed a Material Modification.</p>
--	---	---

Attachment B

Revisions to the PJM Open Access Transmission Tariff

(Marked Format)

TABLE OF CONTENTS

I. COMMON SERVICE PROVISIONS

- 1** **Definitions**
 - OATT Definitions – A – B**
 - OATT Definitions – C – D**
 - OATT Definitions – E – F**
 - OATT Definitions – G – H**
 - OATT Definitions – I – J – K**
 - OATT Definitions – L – M – N**
 - OATT Definitions – O – P – Q**
 - OATT Definitions – R – S**
 - OATT Definitions - T – U – V**
 - OATT Definitions – W – X – Y - Z**
- 2** **Initial Allocation and Renewal Procedures**
- 3** **Ancillary Services**
- 3B** **PJM Administrative Service**
- 3C** **Mid-Atlantic Area Council Charge**
- 3D** **Transitional Market Expansion Charge**
- 3E** **Transmission Enhancement Charges**
- 3F** **Transmission Losses**
- 4** **Open Access Same-Time Information System (OASIS)**
- 5** **Local Furnishing Bonds**
- 6** **Reciprocity**
- 6A** **Counterparty**
- 7** **Billing and Payment**
- 8** **Accounting for a Transmission Owner’s Use of the Tariff**
- 9** **Regulatory Filings**
- 10** **Force Majeure and Indemnification**
- 11** **Creditworthiness**
- 12** **Dispute Resolution Procedures**
- 12A** **PJM Compliance Review**

II. POINT-TO-POINT TRANSMISSION SERVICE

Preamble

- 13** **Nature of Firm Point-To-Point Transmission Service**
- 14** **Nature of Non-Firm Point-To-Point Transmission Service**
- 15** **Service Availability**
- 16** **Transmission Customer Responsibilities**
- 17** **Procedures for Arranging Firm Point-To-Point Transmission Service**
- 18** **Procedures for Arranging Non-Firm Point-To-Point Transmission Service**
- 19** ***Firm Transmission Feasibility Study Procedures For Long-Term Firm Point-To-Point Transmission Service Requests***
- 20** **[Reserved]**

- 21 [Reserved]
- 22 Changes in Service Specifications
- 23 Sale or Assignment of Transmission Service
- 24 Metering and Power Factor Correction at Receipt and Delivery Points(s)
- 25 Compensation for Transmission Service
- 26 Stranded Cost Recovery
- 27 Compensation for New Facilities and Redispatch Costs
- 27A Distribution of Revenues from Non-Firm Point-to-Point Transmission Service

III. NETWORK INTEGRATION TRANSMISSION SERVICE

Preamble

- 28 Nature of Network Integration Transmission Service
- 29 Initiating Service
- 30 Network Resources
- 31 Designation of Network Load
- 32 *Firm Transmission Feasibility Study Procedures For Network Integration Transmission Service Requests*
- 33 Load Shedding and Curtailments
- 34 Rates and Charges
- 35 Operating Arrangements

IV. INTERCONNECTIONS WITH THE TRANSMISSION SYSTEM

Preamble

Subpart A –INTERCONNECTION PROCEDURES

- 36 Interconnection Requests
- 37 Additional Procedures
- 38 Service on Merchant Transmission Facilities
- 39 Local Furnishing Bonds

40-108 [Reserved]

Subpart B – [Reserved]

Subpart C – [Reserved]

Subpart D – [Reserved]

Subpart E – [Reserved]

Subpart F – [Reserved]

Subpart G – SMALL GENERATION INTERCONNECTION PROCEDURE

Preamble

- 109 Pre-application Process
- 110 Permanent Capacity Resource Additions Of 20 MW Or Less
- 111 Permanent Energy Resource Additions Of 20 MW Or Less but Greater than 2 MW (Synchronous) or Greater than 5 MW(Inverter-based)
- 112 Temporary Energy Resource Additions Of 20 MW Or Less But Greater Than 2 MW
- 112A Screens Process for Permanent or Temporary Energy Resources of 2 MW or less (Synchronous) or 5 MW (Inverter-based)

- 112B Certified Inverter-Based Small Generating Facilities No Larger than 10 kW
- 112C [Reserved]

V. GENERATION DEACTIVATION

Preamble

- 113 Notices
- 114 Deactivation Avoidable Cost Credit
- 115 Deactivation Avoidable Cost Rate
- 116 Filing and Updating of Deactivation Avoidable Cost Rate
 - 117 Excess Project Investment Required
 - 118 Refund of Project Investment Reimbursement
 - 118A Recovery of Project Investment
 - 119 Cost of Service Recovery Rate
 - 120 Cost Allocation
 - 121 Performance Standards
 - 122 Black Start Units
 - 123-199 [Reserved]

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

Preamble

- 200 Applicability
- 201 Queue Position
 - Subpart A – SYSTEM IMPACT STUDIES AND FACILITIES STUDIES FOR NEW SERVICE REQUESTS**
 - 202 Coordination with Affected Systems
 - 203 System Impact Study Agreement
 - 204 Tender of System Impact Study Agreement
 - 205 System Impact Study Procedures
 - 206 Facilities Study Agreement
 - 207 Facilities Study Procedures
 - 208 Expedited Procedures for Part II Requests
 - 209 Optional Interconnection Studies
 - 210 Responsibilities of the Transmission Provider and Transmission Owners
 - Subpart B– AGREEMENTS AND COST REPONSIBILITY FOR CUSTOMER- FUNDED UPGRADES**
 - 211 Interim Interconnection Service Agreement
 - 212 Interconnection Service Agreement
 - 213 Upgrade Construction Service Agreement
 - 214 Filing/Reporting of Agreement
 - 215 Transmission Service Agreements
 - 216 Interconnection Requests Designated as Market Solutions
 - 217 Cost Responsibility for Necessary Facilities and Upgrades
 - 218 New Service Requests Involving Affected Systems
 - 219 Inter-queue Allocation of Costs of Transmission Upgrades

- 220 Advance Construction of Certain Network Upgrades
- 221 Transmission Owner Construction Obligation for Necessary Facilities And Upgrades
- 222 Confidentiality
- 223 Confidential Information
- 224 – 229 [Reserved]
- Subpart C – RIGHTS RELATED TO CUSTOMER-FUNDED UPGRADES
- 230 Capacity Interconnection Rights
- 231 Incremental Auction Revenue Rights
- 232 Transmission Injection Rights and Transmission Withdrawal Rights
- 233 Incremental Available Transfer Capability Revenue Rights
- 234 Incremental Capacity Transfer Rights
- 235 Incremental Deliverability Rights
- 236 Interconnection Rights for Certain Transmission Interconnections
- 237 IDR Transfer Agreements

SCHEDULE 1

Scheduling, System Control and Dispatch Service

SCHEDULE 1A

Transmission Owner Scheduling, System Control and Dispatch Service

SCHEDULE 2

Reactive Supply and Voltage Control from Generation Sources Service

SCHEDULE 3

Regulation and Frequency Response Service

SCHEDULE 4

Energy Imbalance Service

SCHEDULE 5

Operating Reserve – Synchronized Reserve Service

SCHEDULE 6

Operating Reserve - Supplemental Reserve Service

SCHEDULE 6A

Black Start Service

SCHEDULE 7

Long-Term Firm and Short-Term Firm Point-To-Point Transmission Service

SCHEDULE 8

Non-Firm Point-To-Point Transmission Service

SCHEDULE 9

PJM Interconnection L.L.C. Administrative Services

SCHEDULE 9-1

Control Area Administration Service

SCHEDULE 9-2

Financial Transmission Rights Administration Service

SCHEDULE 9-3

Market Support Service

SCHEDULE 9-4

Regulation and Frequency Response Administration Service
SCHEDULE 9-5
Capacity Resource and Obligation Management Service
SCHEDULE 9-6
Management Service Cost
SCHEDULE 9-FERC
FERC Annual Charge Recovery
SCHEDULE 9-OPSI
OPSI Funding
SCHEDULE 9-CAPS
CAPS Funding
SCHEDULE 9-FINCON
Finance Committee Retained Outside Consultant
SCHEDULE 9-MMU
MMU Funding
SCHEDULE 9 – PJM SETTLEMENT
SCHEDULE 10 - [Reserved]
SCHEDULE 10-NERC
North American Electric Reliability Corporation Charge
SCHEDULE 10-RFC
Reliability First Corporation Charge
SCHEDULE 11
[Reserved for Future Use]
SCHEDULE 11A
Additional Secure Control Center Data Communication Links and Formula Rate
SCHEDULE 12
Transmission Enhancement Charges
SCHEDULE 12 APPENDIX
SCHEDULE 12-A
SCHEDULE 13
Expansion Cost Recovery Change (ECRC)
SCHEDULE 14
Transmission Service on the Neptune Line
SCHEDULE 14 - Exhibit A
SCHEDULE 15
Non-Retail Behind The Meter Generation Maximum Generation Emergency
Obligations
SCHEDULE 16
Transmission Service on the Linden VFT Facility
SCHEDULE 16 Exhibit A
SCHEDULE 16 – A
Transmission Service for Imports on the Linden VFT Facility
SCHEDULE 17
Transmission Service on the Hudson Line
SCHEDULE 17 - Exhibit A
ATTACHMENT A

Form of Service Agreement For Firm Point-To-Point Transmission Service
ATTACHMENT A-1
Form of Service Agreement For The Resale, Reassignment or Transfer of Point-to-Point Transmission Service
ATTACHMENT B
Form of Service Agreement For Non-Firm Point-To-Point Transmission Service
ATTACHMENT C
Methodology To Assess Available Transfer Capability
ATTACHMENT C-1
Conversion of Service in the Dominion and Duquesne Zones
ATTACHMENT C-2
Conversion of Service in the Duke Energy Ohio, Inc. and Duke Energy Kentucky, Inc, (“DEOK”) Zone
ATTACHMENT D
Methodology for Completing a System Impact Study
ATTACHMENT E
Index of Point-To-Point Transmission Service Customers
ATTACHMENT F
Service Agreement For Network Integration Transmission Service
ATTACHMENT F-1
Form of Umbrella Service Agreement for Network Integration Transmission Service Under State Required Retail Access Programs
ATTACHMENT G
Network Operating Agreement
ATTACHMENT H-1
Annual Transmission Rates -- Atlantic City Electric Company for Network Integration Transmission Service
ATTACHMENT H-1A
Atlantic City Electric Company Formula Rate Appendix A
ATTACHMENT H-1B
Atlantic City Electric Company Formula Rate Implementation Protocols
ATTACHMENT H-2
Annual Transmission Rates -- Baltimore Gas and Electric Company for Network Integration Transmission Service
ATTACHMENT H-2A
Baltimore Gas and Electric Company Formula Rate
ATTACHMENT H-2B
Baltimore Gas and Electric Company Formula Rate Implementation Protocols
ATTACHMENT H-3
Annual Transmission Rates -- Delmarva Power & Light Company for Network Integration Transmission Service
ATTACHMENT H-3A
Delmarva Power & Light Company Load Power Factor Charge Applicable to Service the Interconnection Points
ATTACHMENT H-3B

Delmarva Power & Light Company Load Power Factor Charge Applicable to Service the Interconnection Points
ATTACHMENT H-3C
Delmarva Power & Light Company Under-Frequency Load Shedding Charge
ATTACHMENT H-3D
Delmarva Power & Light Company Formula Rate – Appendix A
ATTACHMENT H-3E
Delmarva Power & Light Company Formula Rate Implementation Protocols
ATTACHMENT H-3F
Old Dominion Electric Cooperative Formula Rate – Appendix A
ATTACHMENT H-3G
Old Dominion Electric Cooperative Formula Rate Implementation Protocols
ATTACHMENT H-4
Annual Transmission Rates -- Jersey Central Power & Light Company for Network Integration Transmission Service
ATTACHMENT H-4A
Other Supporting Facilities - Jersey Central Power & Light Company
ATTACHMENT H-4B
Jersey Central Power & Light Company – *[Reserved]*
ATTACHMENT H-5
Annual Transmission Rates -- Metropolitan Edison Company for Network Integration Transmission Service
ATTACHMENT H-5A
Other Supporting Facilities -- Metropolitan Edison Company
ATTACHMENT H-6
Annual Transmission Rates -- Pennsylvania Electric Company for Network Integration Transmission Service
ATTACHMENT H-6A
Other Supporting Facilities Charges -- Pennsylvania Electric Company
ATTACHMENT H-7
Annual Transmission Rates -- PECO Energy Company for Network Integration Transmission Service
ATTACHMENT H-7A
PECO Energy Company Formula Rate Template
ATTACHMENT H-7B
PECO Energy Company Monthly Deferred Tax Adjustment Charge
ATTACHMENT H-7C
PECO Energy Company Formula Rate Implementation Protocols
ATTACHMENT H-8
Annual Transmission Rates – PPL Group for Network Integration Transmission Service
ATTACHMENT H-8A
Other Supporting Facilities Charges -- PPL Electric Utilities Corporation
ATTACHMENT 8C
UGI Utilities, Inc. Formula Rate – Appendix A
ATTACHMENT 8D

UGI Utilities, Inc. Formula Rate Implementation Protocols
ATTACHMENT 8E
UGI Utilities, Inc. Formula Rate – Appendix A
ATTACHMENT H-8G
Annual Transmission Rates – PPL Electric Utilities Corp.
ATTACHMENT H-8H
Formula Rate Implementation Protocols – PPL Electric Utilities Corp.
ATTACHMENT H-9
Annual Transmission Rates -- Potomac Electric Power Company for Network
Integration Transmission Service
ATTACHMENT H-9A
Potomac Electric Power Company Formula Rate – Appendix A
ATTACHMENT H-9B
Potomac Electric Power Company Formula Rate Implementation Protocols
ATTACHMENT H-9C
Annual Transmission Rate – Southern Maryland Electric Cooperative, Inc. for
Network Integration Transmission Service
ATTACHMENT H-10
Annual Transmission Rates -- Public Service Electric and Gas Company
for Network Integration Transmission Service
ATTACHMENT H-10A
Formula Rate -- Public Service Electric and Gas Company
ATTACHMENT H-10B
Formula Rate Implementation Protocols – Public Service Electric and Gas
Company
ATTACHMENT H-11
Annual Transmission Rates -- Allegheny Power for Network Integration
Transmission Service
ATTACHMENT 11A
Other Supporting Facilities Charges - Allegheny Power
ATTACHMENT H-12
Annual Transmission Rates -- Rockland Electric Company for Network Integration
Transmission Service
ATTACHMENT H-13
Annual Transmission Rates – Commonwealth Edison Company for Network
Integration Transmission Service
ATTACHMENT H-13A
Commonwealth Edison Company Formula Rate – Appendix A
ATTACHMENT H-13B
Commonwealth Edison Company Formula Rate Implementation Protocols
ATTACHMENT H-14
Annual Transmission Rates – AEP East Operating Companies for Network
Integration Transmission Service
ATTACHMENT H-14A
AEP East Operating Companies Formula Rate Implementation Protocols
ATTACHMENT H-14B Part 1

ATTACHMENT H-14B Part 2

ATTACHMENT H-15

**Annual Transmission Rates -- The Dayton Power and Light Company
for Network Integration Transmission Service**

ATTACHMENT H-16

**Annual Transmission Rates -- Virginia Electric and Power Company
for Network Integration Transmission Service**

ATTACHMENT H-16A

Formula Rate - Virginia Electric and Power Company

ATTACHMENT H-16B

Formula Rate Implementation Protocols - Virginia Electric and Power Company

ATTACHMENT H-16C

**Virginia Retail Administrative Fee Credit for Virginia Retail Load Serving
Entities in the Dominion Zone**

ATTACHMENT H-16D – [Reserved]

ATTACHMENT H-16E – [Reserved]

ATTACHMENT H-16AA

Virginia Electric and Power Company

ATTACHMENT H-17

**Annual Transmission Rates -- Duquesne Light Company for Network Integration
Transmission Service**

ATTACHMENT H-17A

Duquesne Light Company Formula Rate – Appendix A

ATTACHMENT H-17B

Duquesne Light Company Formula Rate Implementation Protocols

ATTACHMENT H-17C

Duquesne Light Company Monthly Deferred Tax Adjustment Charge

ATTACHMENT H-18

Annual Transmission Rates – Trans-Allegheny Interstate Line Company

ATTACHMENT H-18A

Trans-Allegheny Interstate Line Company Formula Rate – Appendix A

ATTACHMENT H-18B

Trans-Allegheny Interstate Line Company Formula Rate Implementation Protocols

ATTACHMENT H-19

Annual Transmission Rates – Potomac-Appalachian Transmission Highline, L.L.C.

ATTACHMENT H-19A

Potomac-Appalachian Transmission Highline, L.L.C. Summary

ATTACHMENT H-19B

**Potomac-Appalachian Transmission Highline, L.L.C. Formula Rate
Implementation Protocols**

ATTACHMENT H-20

**Annual Transmission Rates – AEP Transmission Companies (AEPTCo) in the AEP
Zone**

ATTACHMENT H-20A

**AEP Transmission Companies (AEPTCo) in the AEP Zone - Formula Rate
Implementation Protocols**

ATTACHMENT H-20A APPENDIX A

Transmission Formula Rate Settlement for AEPTCo

ATTACHMENT H-20B - Part I

AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate Template

ATTACHMENT H-20B - Part II

AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate Template

ATTACHMENT H-21

Annual Transmission Rates – American Transmission Systems, Inc. for Network Integration Transmission Service

ATTACHMENT H-21A - ATSI

ATTACHMENT H-21A Appendix A - ATSI

ATTACHMENT H-21A Appendix B - ATSI

ATTACHMENT H-21A Appendix C - ATSI

ATTACHMENT H-21A Appendix C - ATSI [Reserved]

ATTACHMENT H-21A Appendix D – ATSI

ATTACHMENT H-21A Appendix E - ATSI

ATTACHMENT H-21A Appendix F – ATSI [Reserved]

ATTACHMENT H-21A Appendix G - ATSI

ATTACHMENT H-21A Appendix G – ATSI (Credit Adj)

ATTACHMENT H-21B ATSI Protocol

ATTACHMENT H-22

Annual Transmission Rates – DEOK for Network Integration Transmission Service and Point-to-Point Transmission Service

ATTACHMENT H-22A

Duke Energy Ohio and Duke Energy Kentucky (DEOK) Formula Rate Template

ATTACHMENT H-22B

DEOK Formula Rate Implementation Protocols

ATTACHMENT H-22C

Additional provisions re DEOK and Indiana

ATTACHMENT H-23

EP Rock springs annual transmission Rate

ATTACHMENT H-24

EKPC Annual Transmission Rates

ATTACHMENT H-24A APPENDIX A

EKPC Schedule 1A

ATTACHMENT H-24A APPENDIX B

EKPC RTEP

ATTACHMENT H-24A APPENDIX C

EKPC True-up

ATTACHMENT H-24A APPENDIX D

EKPC Depreciation Rates

ATTACHMENT H-24-B

EKPC Implementation Protocols

ATTACHMENT H-25

**Annual Transmission Rates – Rochelle Municipal Utilities for Network Integration
Transmission Service and Point-to-Point Transmission Service in the ComEd Zone**
ATTACHMENT H-25A
**Formula Rate Protocols for Rochelle Municipal Utilities Using a Historical Formula
Rate Template**
ATTACHMENT H-25B
**Rochelle Municipal Utilities Transmission Cost of Service Formula Rate – Appendix
A – Transmission Service Revenue Requirement**
ATTACHMENT H-26
Transource West Virginia, LLC Formula Rate Template
ATTACHMENT H-26A
Transource West Virginia, LLC Formula Rate Implementation Protocols
ATTACHMENT H-27
Annual Transmission Rates – Northeast Transmission Development, LLC
ATTACHMENT H-27A
Northeast Transmission Development, LLC Formula Rate Template
ATTACHMENT H-27B
**Northeast Transmission Development, LLC Formula Rate Implementation
Protocols**
ATTACHMENT H-28
**Annual Transmission Rates – Mid-Atlantic Interstate Transmission, LLC for
Network Integration Transmission Service**
ATTACHMENT H-28A
Mid-Atlantic Interstate Transmission, LLC Formula Rate Template
ATTACHMENT H-28B
**Mid-Atlantic Interstate Transmission, LLC Formula Rate Implementation
Protocols**
ATTACHMENT H-29
Annual Transmission Rates – Transource Pennsylvania, LLC
ATTACHMENT H-29A
Transource Pennsylvania, LLC Formula Rate Template
ATTACHMENT H-29B
Transource Pennsylvania, LLC Formula Rate Implementation Protocols
ATTACHMENT H-30
Annual Transmission Rates – Transource Maryland, LLC
ATTACHMENT H-30A
Transource Maryland, LLC Formula Rate Template
ATTACHMENT H-30B
Transource Maryland, LLC Formula Rate Implementation Protocols
ATTACHMENT H-A
**Annual Transmission Rates -- Non-Zone Network Load for Network Integration
Transmission Service**
ATTACHMENT I
Index of Network Integration Transmission Service Customers
ATTACHMENT J
PJM Transmission Zones

ATTACHMENT K

Transmission Congestion Charges and Credits

Preface

ATTACHMENT K -- APPENDIX

Preface

1. MARKET OPERATIONS

- 1.1 Introduction
- 1.2 Cost-Based Offers
- 1.2A Transmission Losses
- 1.3 [Reserved for Future Use]
- 1.4 Market Buyers
- 1.5 Market Sellers
- 1.5A Economic Load Response Participant
- 1.6 Office of the Interconnection
- 1.6A PJM Settlement
- 1.7 General
- 1.8 Selection, Scheduling and Dispatch Procedure Adjustment Process
- 1.9 Prescheduling
- 1.10 Scheduling
- 1.11 Dispatch
- 1.12 Dynamic Transfers

2. CALCULATION OF LOCATIONAL MARGINAL PRICES

- 2.1 Introduction
- 2.2 General
- 2.3 Determination of System Conditions Using the State Estimator
- 2.4 Determination of Energy Offers Used in Calculating
- 2.5 Calculation of Real-time Prices
- 2.6 Calculation of Day-ahead Prices
- 2.6A Interface Prices
- 2.7 Performance Evaluation

3. ACCOUNTING AND BILLING

- 3.1 Introduction
- 3.2 Market Buyers
- 3.3 Market Sellers
 - 3.3A Economic Load Response Participants
- 3.4 Transmission Customers
- 3.5 Other Control Areas
- 3.6 Metering Reconciliation
- 3.7 Inadvertent Interchange

4. [Reserved For Future Use]

5. CALCULATION OF CHARGES AND CREDITS FOR TRANSMISSION CONGESTION AND LOSSES

- 5.1 Transmission Congestion Charge Calculation
- 5.2 Transmission Congestion Credit Calculation
- 5.3 Unscheduled Transmission Service (Loop Flow)
- 5.4 Transmission Loss Charge Calculation
- 5.5 Distribution of Total Transmission Loss Charges

- 6. “MUST-RUN” FOR RELIABILITY GENERATION**
 - 6.1 Introduction
 - 6.2 Identification of Facility Outages
 - 6.3 Dispatch for Local Reliability
 - 6.4 Offer Price Caps
 - 6.5 [Reserved]
 - 6.6 Minimum Generator Operating Parameters –
Parameter-Limited Schedules
- 6A. [Reserved]**
 - 6A.1 [Reserved]
 - 6A.2 [Reserved]
 - 6A.3 [Reserved]
- 7. FINANCIAL TRANSMISSION RIGHTS AUCTIONS**
 - 7.1 Auctions of Financial Transmission Rights
 - 7.1A Long-Term Financial Transmission Rights Auctions
 - 7.2 Financial Transmission Rights Characteristics
 - 7.3 Auction Procedures
 - 7.4 Allocation of Auction Revenues
 - 7.5 Simultaneous Feasibility
 - 7.6 New Stage 1 Resources
 - 7.7 Alternate Stage 1 Resources
 - 7.8 Elective Upgrade Auction Revenue Rights
 - 7.9 Residual Auction Revenue Rights
 - 7.10 Financial Settlement
 - 7.11 PJM Settlement as Counterparty
- 8. EMERGENCY AND PRE-EMERGENCY LOAD RESPONSE PROGRAM**
 - 8.1 Emergency Load Response and Pre-Emergency Load Response Program Options
 - 8.2 Participant Qualifications
 - 8.3 Metering Requirements
 - 8.4 Registration
 - 8.5 Pre-Emergency Operations
 - 8.6 Emergency Operations
 - 8.7 Verification
 - 8.8 Market Settlements
 - 8.9 Reporting and Compliance
 - 8.10 Non-Hourly Metered Customer Pilot
 - 8.11 Emergency Load Response and Pre-Emergency Load Response Participant
Aggregation

ATTACHMENT L

List of Transmission Owners

ATTACHMENT M

PJM Market Monitoring Plan

ATTACHMENT M – APPENDIX

PJM Market Monitor Plan Attachment M Appendix

- I Confidentiality of Data and Information
- II Development of Inputs for Prospective Mitigation

- III Black Start Service
- IV Deactivation Rates
- V Opportunity Cost Calculation
- VI FTR Forfeiture Rule
- VII Forced Outage Rule
- VIII Data Collection and Verification
- ATTACHMENT M-1 (FirstEnergy)**
Energy Procedure Manual for Determining Supplier Total Hourly Energy Obligation
- ATTACHMENT M-2 (First Energy)**
Energy Procedure Manual for Determining Supplier Peak Load Share Procedures for Load Determination
- ATTACHMENT M-2 (ComEd)**
Determination of Capacity Peak Load Contributions and Network Service Peak Load Contributions
- ATTACHMENT M-2 (PSE&G)**
Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers
- ATTACHMENT M-2 (Atlantic City Electric Company)**
Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers
- ATTACHMENT M-2 (Delmarva Power & Light Company)**
Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers
- ATTACHMENT M-2 (Delmarva Power & Light Company)**
Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers
- ATTACHMENT M-2 (Duke Energy Ohio, Inc.)**
Procedures for Determination of Peak Load Contributions, Network Service Peak Load and Hourly Load Obligations for Retail Customers
- ATTACHMENT M-2 (Virginia Electric and Power Company)**
Procedure for Determining Load Serving Entity Network Service Peak Load (NSPL) Contributions
- ATTACHMENT M-3**
Additional Procedures for Planning of Supplemental Projects
- ATTACHMENT N**
Form of Generation Interconnection Feasibility Study Agreement
- ATTACHMENT N-1**
Form of System Impact Study Agreement
- ATTACHMENT N-2**
Form of Facilities Study Agreement
- ATTACHMENT N-3**
Form of Optional Interconnection Study Agreement
- ATTACHMENT O**
Form of Interconnection Service Agreement
- 1.0 Parties

- 2.0 Authority
- 3.0 Customer Facility Specifications
- 4.0 Effective Date
- 5.0 Security
- 6.0 Project Specific Milestones
- 7.0 Provision of Interconnection Service
- 8.0 Assumption of Tariff Obligations
- 9.0 Facilities Study
- 10.0 Construction of Transmission Owner Interconnection Facilities
- 11.0 Interconnection Specifications
- 12.0 Power Factor Requirement
- 12.0A RTU
- 13.0 Charges
- 14.0 Third Party Benefits
- 15.0 Waiver
- 16.0 Amendment
- 17.0 Construction With Other Parts Of The Tariff
- 18.0 Notices
- 19.0 Incorporation Of Other Documents
- 20.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 21.0 Addendum of Interconnection Customer’s Agreement
to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
- 22.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 23.0 Infrastructure Security of Electric System Equipment and Operations and Control
Hardware and Software is Essential to Ensure Day-to-Day Reliability and
Operational Security

Specifications for Interconnection Service Agreement

- 1.0 Description of [generating unit(s)] [Merchant Transmission Facilities] (the
Customer Facility) to be Interconnected with the Transmission System in the PJM
Region
- 2.0 Rights
- 3.0 Construction Responsibility and Ownership of Interconnection Facilities
- 4.0 Subject to Modification Pursuant to the Negotiated Contract Option
- 4.1 Attachment Facilities Charge
- 4.2 Network Upgrades Charge
- 4.3 Local Upgrades Charge
- 4.4 Other Charges
- ~~4.5 Cost of Merchant Network Upgrades~~
- 4.56 Cost breakdown
- 4.67 Security Amount Breakdown

ATTACHMENT O APPENDIX 1: Definitions

ATTACHMENT O APPENDIX 2: Standard Terms and Conditions for Interconnections

**1 Commencement, Term of and Conditions Precedent to
Interconnection Service**

- 1.1 Commencement Date
- 1.2 Conditions Precedent

- 1.3 Term
- 1.4 Initial Operation
- 1.4A Limited Operation
- 1.5 Survival
- 2 Interconnection Service**
 - 2.1 Scope of Service
 - 2.2 Non-Standard Terms
 - 2.3 No Transmission Services
 - 2.4 Use of Distribution Facilities
 - 2.5 Election by Behind The Meter Generation
- 3 Modification Of Facilities**
 - 3.1 General
 - 3.2 Interconnection Request
 - 3.3 Standards
 - 3.4 Modification Costs
- 4 Operations**
 - 4.1 General
 - 4.2 ~~Operation of Merchant Network Upgrades~~ [Reserved]
 - 4.3 Interconnection Customer Obligations
 - 4.4 ~~[Reserved.]~~ Transmission Interconnection Customer Obligations
 - 4.5 Permits and Rights-of-Way
 - 4.6 No Ancillary Services
 - 4.7 Reactive Power
 - 4.8 Under- and Over-Frequency and Under- and Over- Voltage Conditions
 - 4.9 System Protection and System-Power Quality
 - 4.10 Access Rights
 - 4.11 Switching and Tagging Rules
 - 4.12 Communications and Data Protocol
 - 4.13 Nuclear Generating Facilities
- 5 Maintenance**
 - 5.1 General
 - 5.2 ~~Maintenance of Merchant Network Upgrades~~ [Reserved]
 - 5.3 Outage Authority and Coordination
 - 5.4 Inspections and Testing
 - 5.5 Right to Observe Testing
 - 5.6 Secondary Systems
 - 5.7 Access Rights
 - 5.8 Observation of Deficiencies
- 6 Emergency Operations**
 - 6.1 Obligations
 - 6.2 Notice
 - 6.3 Immediate Action
 - 6.4 Record-Keeping Obligations
- 7 Safety**
 - 7.1 General
 - 7.2 Environmental Releases

- 8 Metering**
 - 8.1 General
 - 8.2 Standards
 - 8.3 Testing of Metering Equipment
 - 8.4 Metering Data
 - 8.5 Communications
- 9 Force Majeure**
 - 9.1 Notice
 - 9.2 Duration of Force Majeure
 - 9.3 Obligation to Make Payments
 - 9.4 Definition of Force Majeure
- 10 Charges**
 - 10.1 Specified Charges
 - 10.2 FERC Filings
- 11 Security, Billing And Payments**
 - 11.1 Recurring Charges Pursuant to Section 10
 - 11.2 Costs for Transmission Owner Interconnection Facilities ~~and/or Merchant Network Upgrades~~
 - 11.3 No Waiver
 - 11.4 Interest
- 12 Assignment**
 - 12.1 Assignment with Prior Consent
 - 12.2 Assignment Without Prior Consent
 - 12.3 Successors and Assigns
- 13 Insurance**
 - 13.1 Required Coverages for Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
 - 13.1A Required Coverages for Generation Resources Of 20 Megawatts Or Less
 - 13.2 Additional Insureds
 - 13.3 Other Required Terms
 - 13.3A No Limitation of Liability
 - 13.4 Self-Insurance
 - 13.5 Notices; Certificates of Insurance
 - 13.6 Subcontractor Insurance
 - 13.7 Reporting Incidents
- 14 Indemnity**
 - 14.1 Indemnity
 - 14.2 Indemnity Procedures
 - 14.3 Indemnified Person
 - 14.4 Amount Owing
 - 14.5 Limitation on Damages
 - 14.6 Limitation of Liability in Event of Breach
 - 14.7 Limited Liability in Emergency Conditions
- 15 Breach, Cure And Default**
 - 15.1 Breach

- 15.2 Continued Operation
- 15.3 Notice of Breach
- 15.4 Cure and Default
- 15.5 Right to Compel Performance
- 15.6 Remedies Cumulative
- 16 Termination**
 - 16.1 Termination
 - 16.2 Disposition of Facilities Upon Termination
 - 16.3 FERC Approval
 - 16.4 Survival of Rights
- 17 Confidentiality**
 - 17.1 Term
 - 17.2 Scope
 - 17.3 Release of Confidential Information
 - 17.4 Rights
 - 17.5 No Warranties
 - 17.6 Standard of Care
 - 17.7 Order of Disclosure
 - 17.8 Termination of Interconnection Service Agreement
 - 17.9 Remedies
 - 17.10 Disclosure to FERC or its Staff
 - 17.11 No Interconnection Party Shall Disclose Confidential Information
 - 17.12 Information that is Public Domain
 - 17.13 Return or Destruction of Confidential Information
- 18 Subcontractors**
 - 18.1 Use of Subcontractors
 - 18.2 Responsibility of Principal
 - 18.3 Indemnification by Subcontractors
 - 18.4 Subcontractors Not Beneficiaries
- 19 Information Access And Audit Rights**
 - 19.1 Information Access
 - 19.2 Reporting of Non-Force Majeure Events
 - 19.3 Audit Rights
- 20 Disputes**
 - 20.1 Submission
 - 20.2 Rights Under The Federal Power Act
 - 20.3 Equitable Remedies
- 21 Notices**
 - 21.1 General
 - 21.2 Emergency Notices
 - 21.3 Operational Contacts
- 22 Miscellaneous**
 - 22.1 Regulatory Filing
 - 22.2 Waiver
 - 22.3 Amendments and Rights Under the Federal Power Act
 - 22.4 Binding Effect

	22.5	Regulatory Requirements
23		Representations And Warranties
	23.1	General
24		Tax Liability
	24.1	Safe Harbor Provisions
	24.2.	Tax Indemnity
	24.3	Taxes Other Than Income Taxes
	24.4	Income Tax Gross-Up
	24.5	Tax Status
ATTACHMENT O - SCHEDULE A		
		Customer Facility Location/Site Plan
ATTACHMENT O - SCHEDULE B		
		Single-Line Diagram
ATTACHMENT O - SCHEDULE C		
		List of Metering Equipment
ATTACHMENT O - SCHEDULE D		
		Applicable Technical Requirements and Standards
ATTACHMENT O - SCHEDULE E		
		Schedule of Charges
ATTACHMENT O - SCHEDULE F		
		Schedule of Non-Standard Terms & Conditions
ATTACHMENT O - SCHEDULE G		
		Interconnection Customer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
ATTACHMENT O - SCHEDULE H		
		Interconnection Requirements for a Wind Generation Facility
ATTACHMENT O-1		
		Form of Interim Interconnection Service Agreement
ATTACHMENT P		
		Form of Interconnection Construction Service Agreement
	1.0	Parties
	2.0	Authority
	3.0	Customer Facility
	4.0	Effective Date and Term
	4.1	Effective Date
	4.2	Term
	4.3	Survival
	5.0	Construction Responsibility
	6.0	[Reserved.]
	7.0	Scope of Work
	8.0	Schedule of Work
	9.0	[Reserved.]
	10.0	Notices
	11.0	Waiver
	12.0	Amendment
	13.0	Incorporation Of Other Documents

- 14.0 Addendum of Interconnection Customer’s Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
- 15.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 16.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 17.0 Infrastructure Security of Electric System Equipment and Operations and Control Hardware and Software is Essential to Ensure Day-to-Day Reliability and Operational Security

ATTACHMENT P - APPENDIX 1 – DEFINITIONS

ATTACHMENT P - APPENDIX 2 – STANDARD CONSTRUCTION TERMS AND CONDITIONS

Preamble

1 Facilitation by Transmission Provider

2 Construction Obligations

- 2.1 Interconnection Customer Obligations
- 2.2 Transmission Owner Interconnection Facilities and Merchant Network Upgrades
 - 2.2A Scope of Applicable Technical Requirements and Standards
- 2.3 Construction By Interconnection Customer
- 2.4 Tax Liability
- 2.5 Safety
- 2.6 Construction-Related Access Rights
- 2.7 Coordination Among Constructing Parties

3 Schedule of Work

- 3.1 Construction by Interconnection Customer
- 3.2 Construction by Interconnected Transmission Owner
 - 3.2.1 Standard Option
 - 3.2.2 Negotiated Contract Option
 - 3.2.3 Option to Build
- 3.3 Revisions to Schedule of Work
- 3.4 Suspension
 - 3.4.1 Costs
 - 3.4.2 Duration of Suspension
- 3.5 Right to Complete Transmission Owner Interconnection Facilities
- 3.6 Suspension of Work Upon Default
- 3.7 Construction Reports
- 3.8 Inspection and Testing of Completed Facilities
- 3.9 Energization of Completed Facilities
- 3.10 Interconnected Transmission Owner’s Acceptance of Facilities Constructed by Interconnection Customer

4 Transmission Outages

- 4.1 Outages; Coordination

5 Land Rights; Transfer of Title

- 5.1 Grant of Easements and Other Land Rights
- 5.2 Construction of Facilities on Interconnection Customer Property
- 5.3 Third Parties

- 5.4 Documentation
- 5.5 Transfer of Title to Certain Facilities Constructed By Interconnection Customer
- 5.6 Liens
- 6 Warranties**
 - 6.1 Interconnection Customer Warranty
 - 6.2 Manufacturer Warranties
- 7 [Reserved.]**
- 8 [Reserved.]**
- 9 Security, Billing And Payments**
 - 9.1 Adjustments to Security
 - 9.2 Invoice
 - 9.3 Final Invoice
 - 9.4 Disputes
 - 9.5 Interest
 - 9.6 No Waiver
- 10 Assignment**
 - 10.1 Assignment with Prior Consent
 - 10.2 Assignment Without Prior Consent
 - 10.3 Successors and Assigns
- 11 Insurance**
 - 11.1 Required Coverages For Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
 - 11.1A Required Coverages For Generation Resources of 20 Megawatts Or Less
 - 11.2 Additional Insureds
 - 11.3 Other Required Terms
 - 11.3A No Limitation of Liability
 - 11.4 Self-Insurance
 - 11.5 Notices; Certificates of Insurance
 - 11.6 Subcontractor Insurance
 - 11.7 Reporting Incidents
- 12 Indemnity**
 - 12.1 Indemnity
 - 12.2 Indemnity Procedures
 - 12.3 Indemnified Person
 - 12.4 Amount Owing
 - 12.5 Limitation on Damages
 - 12.6 Limitation of Liability in Event of Breach
 - 12.7 Limited Liability in Emergency Conditions
- 13 Breach, Cure And Default**
 - 13.1 Breach
 - 13.2 Notice of Breach
 - 13.3 Cure and Default
 - 13.3.1 Cure of Breach
 - 13.4 Right to Compel Performance

- 13.5 Remedies Cumulative
- 14 Termination**
 - 14.1 Termination
 - 14.2 [Reserved.]
 - 14.3 Cancellation By Interconnection Customer
 - 14.4 Survival of Rights
- 15 Force Majeure**
 - 15.1 Notice
 - 15.2 Duration of Force Majeure
 - 15.3 Obligation to Make Payments
 - 15.4 Definition of Force Majeure
- 16 Subcontractors**
 - 16.1 Use of Subcontractors
 - 16.2 Responsibility of Principal
 - 16.3 Indemnification by Subcontractors
 - 16.4 Subcontractors Not Beneficiaries
- 17 Confidentiality**
 - 17.1 Term
 - 17.2 Scope
 - 17.3 Release of Confidential Information
 - 17.4 Rights
 - 17.5 No Warranties
 - 17.6 Standard of Care
 - 17.7 Order of Disclosure
 - 17.8 Termination of Construction Service Agreement
 - 17.9 Remedies
 - 17.10 Disclosure to FERC or its Staff
 - 17.11 No Construction Party Shall Disclose Confidential Information of Another Construction Party 17.12 Information that is Public Domain
 - 17.13 Return or Destruction of Confidential Information
- 18 Information Access And Audit Rights**
 - 18.1 Information Access
 - 18.2 Reporting of Non-Force Majeure Events
 - 18.3 Audit Rights
- 19 Disputes**
 - 19.1 Submission
 - 19.2 Rights Under The Federal Power Act
 - 19.3 Equitable Remedies
- 20 Notices**
 - 20.1 General
 - 20.2 Operational Contacts
- 21 Miscellaneous**
 - 21.1 Regulatory Filing
 - 21.2 Waiver
 - 21.3 Amendments and Rights under the Federal Power Act
 - 21.4 Binding Effect

21.5	Regulatory Requirements
22	Representations and Warranties
22.1	General
ATTACHMENT P - SCHEDULE A	
	Site Plan
ATTACHMENT P - SCHEDULE B	
	Single-Line Diagram of Interconnection Facilities
ATTACHMENT P - SCHEDULE C	
	Transmission Owner Interconnection Facilities to be Built by Interconnected Transmission Owner
ATTACHMENT P - SCHEDULE D	
	Transmission Owner Interconnection Facilities to be Built by Interconnection Customer Pursuant to Option to Build
ATTACHMENT P - SCHEDULE E	
	Merchant Network Upgrades to be Built by Interconnected Transmission Owner
ATTACHMENT P - SCHEDULE F	
	Merchant Network Upgrades to be Built by Interconnection Customer Pursuant to Option to Build
ATTACHMENT P - SCHEDULE G	
	Customer Interconnection Facilities
ATTACHMENT P - SCHEDULE H	
	Negotiated Contract Option Terms
ATTACHMENT P - SCHEDULE I	
	Scope of Work
ATTACHMENT P - SCHEDULE J	
	Schedule of Work
ATTACHMENT P - SCHEDULE K	
	Applicable Technical Requirements and Standards
ATTACHMENT P - SCHEDULE L	
	Interconnection Customer's Agreement to Confirm with IRS Safe Harbor Provisions For Non-Taxable Status
ATTACHMENT P - SCHEDULE M	
	Schedule of Non-Standard Terms and Conditions
ATTACHMENT P - SCHEDULE N	
	Interconnection Requirements for a Wind Generation Facility
ATTACHMENT Q	
	PJM Credit Policy
ATTACHMENT R	
	Lost Revenues Of PJM Transmission Owners And Distribution of Revenues Remitted By MISO, SECA Rates to Collect PJM Transmission Owner Lost Revenues Under Attachment X, And Revenues From PJM Existing Transactions
ATTACHMENT S	
	Form of Transmission Interconnection Feasibility Study Agreement
ATTACHMENT T	
	Identification of Merchant Transmission Facilities
ATTACHMENT U	

	Independent Transmission Companies
ATTACHMENT V	Form of ITC Agreement
ATTACHMENT W	COMMONWEALTH EDISON COMPANY
ATTACHMENT X	Seams Elimination Cost Assignment Charges
	NOTICE OF ADOPTION OF NERC TRANSMISSION LOADING RELIEF PROCEDURES
	NOTICE OF ADOPTION OF LOCAL TRANSMISSION LOADING RELIEF PROCEDURES
	SCHEDULE OF PARTIES ADOPTING LOCAL TRANSMISSION LOADING RELIEF PROCEDURES
ATTACHMENT Y	Forms of Screens Process Interconnection Request (For Generation Facilities of 2 MW or less)
ATTACHMENT Z	Certification Codes and Standards
ATTACHMENT AA	Certification of Small Generator Equipment Packages
ATTACHMENT BB	Form of Certified Inverter-Based Generating Facility No Larger Than 10 kW Interconnection Service Agreement
ATTACHMENT CC	Form of Certificate of Completion (Small Generating Inverter Facility No Larger Than 10 kW)
ATTACHMENT DD	Reliability Pricing Model
ATTACHMENT EE	Form of Upgrade Request
ATTACHMENT FF	<i>[Reserved]</i>
ATTACHMENT GG	Form of Upgrade Construction Service Agreement
	Article 1 – Definitions And Other Documents
	1.0 Defined Terms
	1.1 Incorporation of Other Documents
	Article 2 – Responsibility for Direct Assignment Facilities or Customer-Funded Upgrades
	2.0 New Service Customer Financial Responsibilities
	2.1 Obligation to Provide Security
	2.2 Failure to Provide Security
	2.3 Costs
	2.4 Transmission Owner Responsibilities
	Article 3 – Rights To Transmission Service
	3.0 No Transmission Service

- Article 4 – Early Termination
 - 4.0 Termination by New Service Customer
- Article 5 – Rights
 - 5.0 Rights
 - 5.1 Amount of Rights Granted
 - 5.2 Availability of Rights Granted
 - 5.3 Credits
- Article 6 – Miscellaneous
 - 6.0 Notices
 - 6.1 Waiver
 - 6.2 Amendment
 - 6.3 No Partnership
 - 6.4 Counterparts

**ATTACHMENT GG - APPENDIX I –
 SCOPE AND SCHEDULE OF WORK FOR DIRECT ASSIGNMENT
 FACILITIES OR CUSTOMER-FUNDED UPGRADES TO BE BUILT BY
 TRANSMISSION OWNER**

ATTACHMENT GG - APPENDIX II - DEFINITIONS

- 1 Definitions
 - 1.1 Affiliate
 - 1.2 Applicable Laws and Regulations
 - 1.3 Applicable Regional Reliability Council
 - 1.4 Applicable Standards
 - 1.5 Breach
 - 1.6 Breaching Party
 - 1.7 Cancellation Costs
 - 1.8 Commission
 - 1.9 Confidential Information
 - 1.10 Constructing Entity
 - 1.11 Control Area
 - 1.12 Costs
 - 1.13 Default
 - 1.14 Delivering Party
 - 1.15 Emergency Condition
 - 1.16 Environmental Laws
 - 1.17 Facilities Study
 - 1.18 Federal Power Act
 - 1.19 FERC
 - 1.20 Firm Point-To-Point
 - 1.21 Force Majeure
 - 1.22 Good Utility Practice
 - 1.23 Governmental Authority
 - 1.24 Hazardous Substances
 - 1.25 Incidental Expenses
 - 1.26 Local Upgrades
 - 1.27 Long-Term Firm Point-To-Point Transmission Service

- 1.28 MAAC
- 1.29 MAAC Control Zone
- 1.30 NERC
- 1.31 Network Upgrades
- 1.32 Office of the Interconnection
- 1.33 Operating Agreement of the PJM Interconnection, L.L.C. or Operating Agreement
- 1.34 Part I
- 1.35 Part II
- 1.36 Part III
- 1.37 Part IV
- 1.38 Part VI
- 1.39 PJM Interchange Energy Market
- 1.40 PJM Manuals
- 1.41 PJM Region
- 1.42 PJM West Region
- 1.43 Point(s) of Delivery
- 1.44 Point(s) of Receipt
- 1.45 Project Financing
- 1.46 Project Finance Entity
- 1.47 Reasonable Efforts
- 1.48 Receiving Party
- 1.49 Regional Transmission Expansion Plan
- 1.50 Schedule and Scope of Work
- 1.51 Security
- 1.52 Service Agreement
- 1.53 State
- 1.54 Transmission System
- 1.55 VACAR

ATTACHMENT GG - APPENDIX III – GENERAL TERMS AND CONDITIONS

- 1.0 Effective Date and Term
 - 1.1 Effective Date
 - 1.2 Term
 - 1.3 Survival
- 2.0 Facilitation by Transmission Provider
- 3.0 Construction Obligations
 - 3.1 Direct Assignment Facilities or Customer-Funded Upgrades
 - 3.2 Scope of Applicable Technical Requirements and Standards
- 4.0 Tax Liability
 - 4.1 New Service Customer Payments Taxable
 - 4.2 Income Tax Gross-Up
 - 4.3 Private Letter Ruling
 - 4.4 Refund
 - 4.5 Contests
 - 4.6 Taxes Other Than Income Taxes
 - 4.7 Tax Status

- 5.0 Safety
 - 5.1 General
 - 5.2 Environmental Releases
- 6.0 Schedule Of Work
 - 6.1 Standard Option
 - 6.2 Option to Build
 - 6.3 Revisions to Schedule and Scope of Work
 - 6.4 Suspension
- 7.0 Suspension of Work Upon Default
 - 7.1 Notification and Correction of Defects
- 8.0 Transmission Outages
 - 8.1 Outages; Coordination
- 9.0 Security, Billing and Payments
 - 9.1 Adjustments to Security
 - 9.2 Invoice
 - 9.3 Final Invoice
 - 9.4 Disputes
 - 9.5 Interest
 - 9.6 No Waiver
- 10.0 Assignment
 - 10.1 Assignment with Prior Consent
 - 10.2 Assignment Without Prior Consent
 - 10.3 Successors and Assigns
- 11.0 Insurance
 - 11.1 Required Coverages
 - 11.2 Additional Insureds
 - 11.3 Other Required Terms
 - 11.4 No Limitation of Liability
 - 11.5 Self-Insurance
 - 11.6 Notices: Certificates of Insurance
 - 11.7 Subcontractor Insurance
 - 11.8 Reporting Incidents
- 12.0 Indemnity
 - 12.1 Indemnity
 - 12.2 Indemnity Procedures
 - 12.3 Indemnified Person
 - 12.4 Amount Owing
 - 12.5 Limitation on Damages
 - 12.6 Limitation of Liability in Event of Breach
 - 12.7 Limited Liability in Emergency Conditions
- 13.0 Breach, Cure And Default
 - 13.1 Breach
 - 13.2 Notice of Breach
 - 13.3 Cure and Default
 - 13.4 Right to Compel Performance
 - 13.5 Remedies Cumulative

- 14.0 Termination
 - 14.1 Termination
 - 14.2 Cancellation By New Service Customer
 - 14.3 Survival of Rights
 - 14.4 Filing at FERC
- 15.0 Force Majeure
 - 15.1 Notice
 - 15.2 Duration of Force Majeure
 - 15.3 Obligation to Make Payments
- 16.0 Confidentiality
 - 16.1 Term
 - 16.2 Scope
 - 16.3 Release of Confidential Information
 - 16.4 Rights
 - 16.5 No Warranties
 - 16.6 Standard of Care
 - 16.7 Order of Disclosure
 - 16.8 Termination of Upgrade Construction Service Agreement
 - 16.9 Remedies
 - 16.10 Disclosure to FERC or its Staff
 - 16.11 No Party Shall Disclose Confidential Information of Party 16.12
Information that is Public Domain
 - 16.13 Return or Destruction of Confidential Information
- 17.0 Information Access And Audit Rights
 - 17.1 Information Access
 - 17.2 Reporting of Non-Force Majeure Events
 - 17.3 Audit Rights
 - 17.4 Waiver
 - 17.5 Amendments and Rights under the Federal Power Act
 - 17.6 Regulatory Requirements
- 18.0 Representation and Warranties
 - 18.1 General
- 19.0 Inspection and Testing of Completed Facilities
 - 19.1 Coordination
 - 19.2 Inspection and Testing
 - 19.3 Review of Inspection and Testing by Transmission Owner
 - 19.4 Notification and Correction of Defects
 - 19.5 Notification of Results
- 20.0 Energization of Completed Facilities
- 21.0 Transmission Owner's Acceptance of Facilities Constructed
by New Service Customer
- 22.0 Transfer of Title to Certain Facilities Constructed By New Service Customer
- 23.0 Liens

**ATTACHMENT HH – RATES, TERMS, AND CONDITIONS OF SERVICE FOR
PJMSETTLEMENT, INC.**

ATTACHMENT II – MTEP PROJECT COST RECOVERY FOR ATSI ZONE

ATTACHMENT JJ – MTEP PROJECT COST RECOVERY FOR DEOK ZONE

ATTACHMENT KK - FORM OF DESIGNATED ENTITY AGREEMENT

**ATTACHMENT LL - FORM OF INTERCONNECTION COORDINATION
AGREEMENT**

***ATTACHMENT MM – FORM OF PSEUDO-TIE AGREEMENT – WITH NATIVE BA AS
PARTY***

***ATTACHMENT MM-1 – FORM OF SYSTEM MODIFICATION COST
REIMBURSEMENT AGREEMENT – PSEUDO-TIE INTO PJM***

***ATTACHMENT NN – FORM OF PSEUDO-TIE AGREEMENT WITHOUT NATIVE BA AS
PARTY***

**ATTACHMENT OO – FORM OF DYNAMIC SCHEDULE AGREEMENT INTO THE
PJM REGION**

***ATTACHMENT PP – FORM OF FIRM TRANSMISSION FEASIBILITY STUDY
AGREEMENT***

Definitions – L – M - N

Limited Demand Resource:

“Limited Demand Resource” shall have the meaning specified in the Reliability Assurance Agreement.

Limited Demand Resource Reliability Target:

“Limited Demand Resource Reliability Target” for the PJM Region or an LDA, shall mean the maximum amount of Limited Demand Resources determined by PJM to be consistent with the maintenance of reliability, stated in Unforced Capacity that shall be used to calculate the Minimum Extended Summer Demand Resource Requirement for Delivery Years through May 31, 2017 and the Limited Resource Constraint for the 2017/2018 and 2018/2019 Delivery Years for the PJM Region or such LDA. As more fully set forth in the PJM Manuals, PJM calculates the Limited Demand Resource Reliability Target by first: i) testing the effects of the ten-interruption requirement by comparing possible loads on peak days under a range of weather conditions (from the daily load forecast distributions for the Delivery Year in question) against possible generation capacity on such days under a range of conditions (using the cumulative capacity distributions employed in the Installed Reserve Margin study for the PJM Region and in the Capacity Emergency Transfer Objective study for the relevant LDAs for such Delivery Year) and, by varying the assumed amounts of DR that is committed and displaces committed generation, determines the DR penetration level at which there is a ninety percent probability that DR will not be called (based on the applicable operating reserve margin for the PJM Region and for the relevant LDAs) more than ten times over those peak days; ii) testing the six-hour duration requirement by calculating the MW difference between the highest hourly unrestricted peak load and seventh highest hourly unrestricted peak load on certain high peak load days (e.g., the annual peak, loads above the weather normalized peak, or days where load management was called) in recent years, then dividing those loads by the forecast peak for those years and averaging the result; and (iii) (for the 2016/2017 and 2017/2018 Delivery Years) testing the effects of the six-hour duration requirement by comparing possible hourly loads on peak days under a range of weather conditions (from the daily load forecast distributions for the Delivery Year in question) against possible generation capacity on such days under a range of conditions (using a Monte Carlo model of hourly capacity levels that is consistent with the capacity model employed in the Installed Reserve Margin study for the PJM Region and in the Capacity Emergency Transfer Objective study for the relevant LDAs for such Delivery Year) and, by varying the assumed amounts of DR that is committed and displaces committed generation, determines the DR penetration level at which there is a ninety percent probability that DR will not be called (based on the applicable operating reserve margin for the PJM Region and for the relevant LDAs) for more than six hours over any one or more of the tested peak days. Second, PJM adopts the lowest result from these three tests as the Limited Demand Resource Reliability Target. The Limited Demand Resource Reliability Target shall be expressed as a percentage of the forecasted peak load of the PJM Region or such LDA and is converted to Unforced Capacity by multiplying [the reliability target percentage] times [the Forecast Pool Requirement] times [the DR Factor] times [the forecasted peak load of the PJM Region or such LDA, reduced by the amount of load served under the FRR Alternative].

Limited Resource Constraint:

“Limited Resource Constraint” shall mean, for the 2017/2018 Delivery Year and for FRR Capacity Plans the 2017/2018 and Delivery Years, for the PJM Region or each LDA for which the Office of the Interconnection is required under Tariff, Attachment DD, section 5.10(a) to establish a separate VRR Curve for a Delivery Year, a limit on the total amount of Unforced Capacity that can be committed as Limited Demand Resources for the 2017/2018 Delivery Year in the PJM Region or in such LDA, calculated as the Limited Demand Resource Reliability Target for the PJM Region or such LDA, respectively, minus the Short Term Resource Procurement Target for the PJM Region or such LDA, respectively.

Limited Resource Price Decrement:

“Limited Resource Price Decrement” shall mean, for the 2017/2018 Delivery Year, a difference between the clearing price for Limited Demand Resources and the clearing price for Extended Summer Demand Resources and Annual Resources, representing the cost to procure additional Extended Summer Demand Resources or Annual Resources out of merit order when the Limited Resource Constraint is binding.

List of Approved Contractors:

“List of Approved Contractors” shall mean a list developed by each Transmission Owner and published in a PJM Manual of (a) contractors that the Transmission Owner considers to be qualified to install or construct new facilities and/or upgrades or modifications to existing facilities on the Transmission Owner’s system, provided that such contractors may include, but need not be limited to, contractors that, in addition to providing construction services, also provide design and/or other construction-related services, and (b) manufacturers or vendors of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) whose products the Transmission Owner considers acceptable for installation and use on its system.

Load Management:

“Load Management” shall mean a Demand Resource (“DR”) as defined in the Reliability Assurance Agreement.

Load Management Event:

“Load Management Event” shall mean a) a single temporally contiguous dispatch of Demand Resources in a Compliance Aggregation Area during an Operating Day, or b) multiple dispatches of Demand Resources in a Compliance Aggregation Area during an Operating Day that are temporally contiguous.

Load Ratio Share:

“Load Ratio Share” shall mean the ratio of a Transmission Customer’s Network Load to the Transmission Provider’s total load.

Load Reduction Event:

“Load Reduction Event” shall mean a reduction in demand by a Member or Special Member for the purpose of participating in the PJM Interchange Energy Market.

Load Serving Entity (LSE):

“Load Serving Entity” or “LSE” shall have the meaning specified in the Reliability Assurance Agreement.

Load Shedding:

“Load Shedding” shall mean the systematic reduction of system demand by temporarily decreasing load in response to transmission system or area capacity shortages, system instability, or voltage control considerations under Tariff, Part II or Part III.

Local Upgrades:

“Local Upgrades” shall mean modifications or additions of facilities to abate any local thermal loading, voltage, short circuit, stability or similar engineering problem caused by the interconnection and delivery of generation to the Transmission System. Local Upgrades shall include:

(i) Direct Connection Local Upgrades which are Local Upgrades that only serve the Customer Interconnection Facility and have no impact or potential impact on the Transmission System until the final tie-in is complete; and

(ii) Non-Direct Connection Local Upgrades which are parallel flow Local Upgrades that are not Direct Connection Local Upgrades.

Location:

“Location” as used in the Economic Load Response rules shall mean an end-use customer site as defined by the relevant electric distribution company account number.

LOC Deviation:

“LOC Deviation,” shall mean, for units other than wind units, the LOC Deviation shall equal the desired megawatt amount for the resource determined according to the point on the Final Offer curve corresponding to the *Real-time Settlement Interval* real-time Locational Marginal Price at the resource’s bus and adjusted for any Regulation or Tier 2 Synchronized Reserve assignments and limited to the lesser of the unit’s Economic Maximum or the unit’s Generation Resource Maximum Output, minus the actual output of the unit. For wind units, the LOC Deviation shall

mean the deviation of the generating unit's output equal to the lesser of the PJM forecasted output for the unit or the desired megawatt amount for the resource determined according to the point on the Final Offer curve corresponding to the *Real-time Settlement Interval* integrated real-time Locational Marginal Price at the resource's bus, and shall be limited to the lesser of the unit's Economic Maximum or the unit's Generation Resource Maximum Output, minus the actual output of the unit.

Locational Deliverability Area (LDA):

“Locational Deliverability Area” or “LDA” shall mean a geographic area within the PJM Region that has limited transmission capability to import capacity to satisfy such area's reliability requirement, as determined by the Office of the Interconnection in connection with preparation of the Regional Transmission Expansion Plan, and as specified in Reliability Assurance Agreement, Schedule 10.1.

Locational Deliverability Area Reliability Requirement:

“Locational Deliverability Area Reliability Requirement” shall mean the projected internal capacity in the Locational Deliverability Area plus the Capacity Emergency Transfer Objective for the Delivery Year, as determined by the Office of the Interconnection in connection with preparation of the Regional Transmission Expansion Plan, less the minimum internal resources required for all FRR Entities in such Locational Deliverability Area.

Locational Price Adder:

“Locational Price Adder” shall mean an addition to the marginal value of Unforced Capacity within an LDA as necessary to reflect the price of Capacity Resources required to relieve applicable binding locational constraints.

Locational Reliability Charge:

“Locational Reliability Charge” shall have the meaning specified in the Reliability Assurance Agreement.

Locational UCAP:

“Locational UCAP” shall mean unforced capacity that a Member with available uncommitted capacity sells in a bilateral transaction to a Member that previously committed capacity through an RPM Auction but now requires replacement capacity to fulfill its RPM Auction commitment. The Locational UCAP Seller retains responsibility for performance of the resource providing such replacement capacity.

Locational UCAP Seller:

“Locational UCAP Seller” shall mean a Member that sells Locational UCAP.

Long-lead Project:

“Long-lead Project” shall have the same meaning provided in the Operating Agreement.

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

“Long-Term Firm Point-To-Point Transmission Service” shall mean firm Point-To-Point Transmission Service under Tariff, Part II with a term of one year or more.

Loss Price:

“Loss Price” shall mean the loss component of the Locational Marginal Price, which is the effect on transmission loss costs (whether positive or negative) associated with increasing the output of a generation resource or decreasing the consumption by a Demand Resource based on the effect of increased generation from or consumption by the resource on transmission losses, calculated as specified in Operating Agreement, Schedule 1, section 2, and the parallel provisions of Tariff, Attachment K-Appendix.

Maintenance Adder:

“Maintenance Adder” shall mean an adder that may be included to account for variable operation and maintenance expenses in a Market Seller’s Fuel Cost Policy. The Maintenance Adder is calculated in accordance with the applicable provisions of PJM Manual 15, and may only include expenses incurred as a result of electric production.

Manual Load Dump Action:

“Manual Load Dump Action” shall mean an Operating Instruction, as defined by NERC, from PJM to shed firm load when the PJM Region cannot provide adequate capacity to meet the PJM Region’s load and tie schedules, or to alleviate critically overloaded transmission lines or other equipment.

Manual Load Dump Warning:

“Manual Load Dump Warning” shall mean a notification from PJM to warn Members of an increasingly critical condition of present operations that may require manually shedding load.

Market Monitor:

“Market Monitor” means the head of the Market Monitoring Unit.

Market Monitoring Unit or MMU:

“Market Monitoring Unit” or “MMU” means the organization that is responsible for implementing this Plan, including the Market Monitor.

Market Monitoring Unit Advisory Committee or MMU Advisory Committee:

“Market Monitoring Unit Advisory Committee” or “MMU Advisory Committee” shall mean the committee established under Tariff, Attachment M, section III.H.

Market Operations Center:

“Market Operations Center” shall mean the equipment, facilities and personnel used by or on behalf of a Market Participant to communicate and coordinate with the Office of the Interconnection in connection with transactions in the PJM Interchange Energy Market or the operation of the PJM Region.

Market Participant:

“Market Participant” shall mean a Market Buyer, a Market Seller, an Economic Load Response Participant, or all three, except when such term is used in Attachment M of the Tariff, in which case Market Participant shall mean an entity that generates, transmits, distributes, purchases, or sells electricity, ancillary services, or any other product or service provided under the PJM Tariff or Operating Agreement within, into, out of, or through the PJM Region, but it shall not include an Authorized Government Agency that consumes energy for its own use but does not purchase or sell energy at wholesale.

Market Participant Energy Injection:

“Market Participant Energy Injection” shall mean transactions in the Day-ahead Energy Market and Real-time Energy Market, including but not limited to Day-ahead generation schedules, real-time generation output, Increment Offers, internal bilateral transactions and import transactions, as further described in the PJM Manuals.

Market Participant Energy Withdrawal:

“Market Participant Energy Withdrawal” shall mean transactions in the Day-ahead Energy Market and Real-time Energy Market, including but not limited to Demand Bids, Decrement Bids, real-time load (net of Behind The Meter Generation expected to be operating, but not to be less than zero), internal bilateral transactions and Export Transactions, as further described in the PJM Manuals.

Market Seller Offer Cap:

“Market Seller Offer Cap” shall mean a maximum offer price applicable to certain Market Sellers under certain conditions, as determined in accordance with Tariff, Attachment DD, section 6 and Tariff, Attachment M-Appendix, section II.E.

Market Violation:

“Market Violation” shall mean a tariff violation, violation of a Commission-approved order, rule or regulation, market manipulation, or inappropriate dispatch that creates substantial concerns regarding unnecessary market inefficiencies, as defined in 18 C.F.R. § 35.28(b)(8).

Material Modification:

“Material Modification” shall mean any modification to an Interconnection Request that has a material adverse effect on the cost or timing of Interconnection Studies related to, or any Network Upgrades or Local Upgrades needed to accommodate, any Interconnection Request with a later Queue Position.

Maximum Daily Starts:

“Maximum Daily Starts” shall mean the maximum number of times that a generating unit can be started in an Operating Day under normal operating conditions.

Maximum Emergency:

“Maximum Emergency” shall mean the designation of all or part of the output of a generating unit for which the designated output levels may require extraordinary procedures and therefore are available to the Office of the Interconnection only when the Office of the Interconnection declares a Maximum Generation Emergency and requests generation designated as Maximum Emergency to run. The Office of the Interconnection shall post on the PJM website the aggregate amount of megawatts that are classified as Maximum Emergency.

Maximum Facility Output:

“Maximum Facility Output” shall mean the maximum (not nominal) net electrical power output in megawatts, specified in the Interconnection Service Agreement, after supply of any parasitic or host facility loads, that a Generation Interconnection Customer’s Customer Facility is expected to produce, provided that the specified Maximum Facility Output shall not exceed the output of the proposed Customer Facility that Transmission Provider utilized in the System Impact Study.

Maximum Generation Emergency:

“Maximum Generation Emergency” shall mean an Emergency declared by the Office of the Interconnection to address either a generation or transmission emergency in which the Office of the Interconnection anticipates requesting one or more Generation Capacity Resources, or Non-Retail Behind The Meter Generation resources to operate at its maximum net or gross electrical power output, subject to the equipment stress limits for such Generation Capacity Resource or Non-Retail Behind The Meter resource in order to manage, alleviate, or end the Emergency.

Maximum Generation Emergency Alert:

“Maximum Generation Emergency Alert” shall mean an alert issued by the Office of the Interconnection to notify PJM Members, Transmission Owners, resource owners and operators, customers, and regulators that a Maximum Generation Emergency may be declared, for any Operating Day in either, as applicable, the Day-ahead Energy Market or the Real-time Energy Market, for all or any part of such Operating Day.

Maximum Run Time:

“Maximum Run Time” shall mean the maximum number of hours a generating unit can run over the course of an Operating Day, as measured by PJM’s State Estimator.

Maximum Weekly Starts:

“Maximum Weekly Starts” shall mean the maximum number of times that a generating unit can be started in one week, defined as the 168 hour period starting Monday 0001 hour, under normal operating conditions.

Member:

“Member” shall have the meaning provided in the Operating Agreement.

Merchant A.C. Transmission Facilities:

“Merchant A.C. Transmission Facility” shall mean Merchant Transmission Facilities that are alternating current (A.C.) transmission facilities, other than those that are Controllable A.C. Merchant Transmission Facilities.

Merchant D.C. Transmission Facilities:

“Merchant D.C. Transmission Facilities” shall mean direct current (D.C.) transmission facilities that are interconnected with the Transmission System pursuant to Tariff, Part IV and Part VI.

Merchant Network Upgrades:

“Merchant Network Upgrades” shall mean additions to, or modifications or replacements of, physical facilities of the Interconnected Transmission Owner that, on the date of the pertinent Transmission Interconnection Customer’s Upgrade Request, are part of the Transmission System or are included in the Regional Transmission Expansion Plan.

Merchant Transmission Facilities:

“Merchant Transmission Facilities” shall mean A.C. or D.C. transmission facilities that are interconnected with or added to the Transmission System pursuant to Tariff, Part IV and Part VI and that are so identified on Attachment T to the Tariff, provided, however, that Merchant Transmission Facilities shall not include (i) any Customer Interconnection Facilities, (ii) any physical facilities of the Transmission System that were in existence on or before March 20,

2003 ; (iii) any expansions or enhancements of the Transmission System that are not identified as Merchant Transmission Facilities in the Regional Transmission Expansion Plan and Attachment T to the Tariff, or (iv) any transmission facilities that are included in the rate base of a public utility and on which a regulated return is earned.

Merchant Transmission Provider:

“Merchant Transmission Provider” shall mean an Interconnection Customer that (1) owns, controls, or controls the rights to use the transmission capability of, Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area, (2) has elected to receive Transmission Injection Rights and Transmission Withdrawal Rights associated with such facility pursuant to Section 36 of the Tariff, and (3) makes (or will make) the transmission capability of such facilities available for use by third parties under terms and conditions approved by the Commission and stated in the Tariff, consistent with Tariff, section 38.

Metering Equipment:

“Metering Equipment” shall mean all metering equipment installed at the metering points designated in the appropriate appendix to an Interconnection Service Agreement.

Minimum Annual Resource Requirement:

“Minimum Annual Resource Requirement” shall mean, for Delivery Years through May 31, 2017, the minimum amount of capacity that PJM will seek to procure from Annual Resources for the PJM Region and for each Locational Deliverability Area for which the Office of the Interconnection is required under Tariff, Attachment DD, section 5.10(a) to establish a separate VRR Curve for such Delivery Year. For the PJM Region, the Minimum Annual Resource Requirement shall be equal to the RTO Reliability Requirement minus [the Sub-Annual Resource Reliability Target for the RTO in Unforced Capacity]. For an LDA, the Minimum Annual Resource Requirement shall be equal to the LDA Reliability Requirement minus [the LDA CETL] minus [the Sub-Annual Resource Reliability Target for such LDA in Unforced Capacity]. The LDA CETL may be adjusted pro rata for the amount of load served under the FRR Alternative.

Minimum Down Time:

For all generating units that are not combined cycle units, “Minimum Down Time” shall mean the minimum number of hours under normal operating conditions between unit shutdown and unit startup, calculated as the shortest time difference between the unit’s generator breaker opening and after the unit’s generator breaker closure, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero. For combined cycle units, “Minimum Down Time” shall mean the minimum number of hours between the last generator breaker opening and after first combustion turbine generator breaker closure, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero.

Minimum Extended Summer Resource Requirement:

“Minimum Extended Summer Resource Requirement” shall mean, for Delivery Years through May 31, 2017, the minimum amount of capacity that PJM will seek to procure from Extended Summer Demand Resources and Annual Resources for the PJM Region and for each Locational Deliverability Area for which the Office of the Interconnection is required under Tariff, Attachment DD, section 5.10(a) to establish a separate VRR Curve for such Delivery Year. For the PJM Region, the Minimum Extended Summer Resource Requirement shall be equal to the RTO Reliability Requirement minus [the Limited Demand Resource Reliability Target for the PJM Region in Unforced Capacity]. For an LDA, the Minimum Extended Summer Resource Requirement shall be equal to the LDA Reliability Requirement minus [the LDA CETL] minus [the Limited Demand Resource Reliability Target for such LDA in Unforced Capacity]. The LDA CETL may be adjusted pro rata for the amount of load served under the FRR Alternative.

Minimum Generation Emergency:

“Minimum Generation Emergency” shall mean an Emergency declared by the Office of the Interconnection in which the Office of the Interconnection anticipates requesting one or more generating resources to operate at or below Normal Minimum Generation, in order to manage, alleviate, or end the Emergency.

Minimum Participation Requirements:

“Minimum Participation Requirements” shall mean a set of minimum training, risk management, communication and capital or collateral requirements required for Participants in the PJM Markets, as set forth herein and in the Form of Annual Certification set forth as Tariff, Attachment Q, Appendix 1. Participants transacting in FTRs in certain circumstances will be required to demonstrate additional risk management procedures and controls as further set forth in the Annual Certification found in Tariff, Attachment Q, Appendix 1.

Minimum Run Time:

For all generating units that are not combined cycle units, “Minimum Run Time” shall mean the minimum number of hours a unit must run, in real-time operations, from the time after generator breaker closure, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero, to the time of generator breaker opening, as measured by PJM's State Estimator. For combined cycle units, “Minimum Run Time” shall mean the time period after the first combustion turbine generator breaker closure, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero, and the last generator breaker opening as measured by PJM's State Estimator.

MISO:

“MISO” shall mean the Midcontinent Independent System Operator, Inc. or any successor thereto.

Multi-Driver Project:

“Multi-Driver Project” shall have the same meaning provided in the Operating Agreement.

Native Load Customers:

“Native Load Customers” shall mean the wholesale and retail power customers of a Transmission Owner on whose behalf the Transmission Owner, by statute, franchise, regulatory requirement, or contract, has undertaken an obligation to construct and operate the Transmission Owner’s system to meet the reliable electric needs of such customers.

NERC:

“NERC” shall mean the North American Electric Reliability Corporation or any successor thereto.

NERC Interchange Distribution Calculator:

“NERC Interchange Distribution Calculator” shall mean the NERC mechanism that is in effect and being used to calculate the distribution of energy, over specific transmission interfaces, from energy transactions.

Net Benefits Test:

“Net Benefits Test” shall mean a calculation to determine whether the benefits of a reduction in price resulting from the dispatch of Economic Load Response exceeds the cost to other loads resulting from the billing unit effects of the load reduction, as specified in Operating Agreement, Schedule 1, section 3.3A.4 and the parallel provisions of Tariff, Attachment K-Appendix, section 3.3A.4.

Net Cost of New Entry:

“Net Cost of New Entry” shall mean the Cost of New Entry minus the Net Energy and Ancillary Service Revenue Offset.

Net Obligation:

“Net Obligation” shall mean the amount owed to PJMSettlement and PJM for purchases from the PJM Markets, Transmission Service, (under Tariff, Parts Part II and III , and other services pursuant to the Agreements, after applying a deduction for amounts owed to a Participant by PJMSettlement as it pertains to monthly market activity and services. Should other markets be formed such that Participants may incur future Obligations in those markets, then the aggregate amount of those Obligations will also be added to the Net Obligation.

Net Sell Position:

“Net Sell Position” shall mean the amount of Net Obligation when Net Obligation is negative.

Network Customer:

“Network Customer” shall mean an entity receiving transmission service pursuant to the terms of the Transmission Provider’s Network Integration Transmission Service under Tariff, Part III.

Network External Designated Transmission Service:

“Network External Designated Transmission Service” shall have the meaning set forth in Article I of the Reliability Assurance Agreement.

Network Integration Transmission Service:

“Network Integration Transmission Service” shall mean the transmission service provided under Tariff, Part III.

Network Load:

“Network Load” shall mean the load that a Network Customer designates for Network Integration Transmission Service under Tariff, Part III. The Network Customer’s Network Load shall include all load (including losses) served by the output of any Network Resources designated by the Network Customer. A Network Customer may elect to designate less than its total load as Network Load but may not designate only part of the load at a discrete Point of Delivery. Where an Eligible Customer has elected not to designate a particular load at discrete points of delivery as Network Load, the Eligible Customer is responsible for making separate arrangements under Tariff, Part II for any Point-To-Point Transmission Service that may be necessary for such non-designated load.

Network Operating Agreement:

“Network Operating Agreement” shall mean an executed agreement that contains the terms and conditions under which the Network Customer shall operate its facilities and the technical and operational matters associated with the implementation of Network Integration Transmission Service under Tariff, Part III.

Network Operating Committee:

“Network Operating Committee” shall mean a group made up of representatives from the Network Customer(s) and the Transmission Provider established to coordinate operating criteria and other technical considerations required for implementation of Network Integration Transmission Service under Tariff, Part III.

Network Resource:

“Network Resource” shall mean any designated generating resource owned, purchased, or leased by a Network Customer under the Network Integration Transmission Service Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer’s Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program.

Network Service User:

“Network Service User” shall mean an entity using Network Transmission Service.

Network Transmission Service:

“Network Transmission Service” shall mean transmission service provided pursuant to the rates, terms and conditions set forth in Tariff, Part III, or transmission service comparable to such service that is provided to a Load Serving Entity that is also a Transmission Owner.

Network Upgrades:

“Network Upgrades” shall mean modifications or additions to transmission-related facilities that are integrated with and support the Transmission Provider’s overall Transmission System for the general benefit of all users of such Transmission System. Network Upgrades shall include:

(i) **Direct Connection Network Upgrades** which are Network Upgrades that only serve the Customer Interconnection Facility and have no impact or potential impact on the Transmission System until the final tie-in is complete; and

(ii) **Non-Direct Connection Network Upgrades** which are parallel flow Network Upgrades that are not Direct Connection Network Upgrades.

Neutral Party:

“Neutral Party” shall have the meaning provided in Tariff, Part I, section 9.3(v).

New PJM Zone(s):

“New PJM Zone(s)” shall mean the Zone included in the Tariff, along with applicable Schedules and Attachments, for Commonwealth Edison Company, The Dayton Power and Light Company and the AEP East Operating Companies (Appalachian Power Company, Columbus Southern Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company).

New Service Customers:

“New Service Customers” shall mean all customers that submit an Interconnection Request, a Completed Application, or an Upgrade Request that is pending in the New Services Queue.

New Service Request:

“New Service Request” shall mean an Interconnection Request, a Completed Application, or an Upgrade Request.

New Services Queue:

“New Service Queue” shall mean all Interconnection Requests, Completed Applications, and Upgrade Requests that are received within each ~~threesix~~-month period ending on ~~January 31,~~ April 30, ~~July 31,~~ and October 31 of each year shall collectively comprise a New Services Queue.

New Services Queue Closing Date:

“New Services Queue Closing Date” shall mean each ~~January 31,~~ April 30, ~~July 31,~~ and October 31 shall be the Queue Closing Date for the New Services Queue comprised of Interconnection Requests, Completed Applications, and Upgrade Requests received during the ~~threesix~~-month period ending on such date.

New York ISO or NYISO:

“New York ISO” or “NYISO” shall mean the New York Independent System Operator, Inc. or any successor thereto.

Nodal Reference Price:

The “Nodal Reference Price” at each location shall mean the 97th percentile price differential between day-ahead and real-time prices experienced over the corresponding two-month reference period in the prior calendar year. Reference periods will be Jan-Feb, Mar-Apr, May-Jun, Jul-Aug, Sept-Oct, Nov-Dec. For any given current-year month, the reference period months will be the set of two months in the prior calendar year that include the month corresponding to the current month. For example, July and August 2003 would each use July-August 2002 as their reference period.

No-load Cost:

“No-load Cost” shall mean the hourly cost required to create the starting point of a monotonically increasing incremental offer curve for a generating unit.

Nominal Rated Capability:

“Nominal Rated Capability” shall mean the nominal maximum rated capability in megawatts of a Transmission Interconnection Customer’s Customer Facility or the nominal increase in transmission capability in megawatts of the Transmission System resulting from the interconnection or addition of a Transmission Interconnection Customer’s Customer Facility, as

determined in accordance with pertinent Applicable Standards and specified in the Interconnection Service Agreement.

Nominated Demand Resource Value:

“Nominated Demand Resource Value” shall mean the amount of load reduction that a Demand Resource commits to provide either through direct load control, firm service level or guaranteed load drop programs. For existing Demand Resources, the maximum Nominated Demand Resource Value is limited, in accordance with the PJM Manuals, to the value appropriate for the method by which the load reduction would be accomplished, at the time the Base Residual Auction or Incremental Auction is being conducted.

Nominated Energy Efficiency Value:

“Nominated Energy Efficiency Value” shall mean the amount of load reduction that an Energy Efficiency Resource commits to provide through installation of more efficient devices or equipment or implementation of more efficient processes or systems.

Non-Firm Point-To-Point Transmission Service:

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

Non-Firm Sale:

“Non-Firm Sale” shall mean an energy sale for which receipt or delivery may be interrupted for any reason or no reason, without liability on the part of either the buyer or seller.

Non-Firm Transmission Withdrawal Rights:

“No-Firm Transmission Withdrawal Rights” shall mean the rights to schedule energy withdrawals from a specified point on the Transmission System. Non-Firm Transmission Withdrawal Rights may be awarded only to a Merchant D.C. Transmission Facility that connects the Transmission System to another control area. Withdrawals scheduled using Non-Firm Transmission Withdrawal Rights have rights similar to those under Non-Firm Point-to-Point Transmission Service.

Non-Performance Charge:

“Non-Performance Charge” shall mean the charge applicable to Capacity Performance Resources as defined in Attachment DD, § 10A(e).

Nonincumbent Developer:

“Nonincumbent Developer” shall have the same meaning provided in the Operating Agreement.

Non-Regulatory Opportunity Cost:

“Non-Regulatory Opportunity Cost” shall mean the difference between (a) the forecasted cost to operate a specific generating unit when the unit only has a limited number of starts or available run hours resulting from (i) the physical equipment limitations of the unit, for up to one year, due to original equipment manufacturer recommendations or insurance carrier restrictions, (ii) a fuel supply limitation, for up to one year, resulting from an event of Catastrophic Force Majeure; and, (b) the forecasted future Locational Marginal Price at which the generating unit could run while not violating such limitations. Non-Regulatory Opportunity Cost therefore is the value associated with a specific generating unit’s lost opportunity to produce energy during a higher valued period of time occurring within the same period of time in which the unit is bound by the referenced restrictions, and is reflected in the rules set forth in PJM Manual 15. Non-Regulatory Opportunity Costs shall be limited to those resources which are specifically delineated in Schedule 2 of the Operating Agreement.

Non-Retail Behind The Meter Generation:

“Non-Retail Behind The Meter Generation” shall mean Behind the Meter Generation that is used by municipal electric systems, electric cooperatives, or electric distribution companies to serve load.

Non-Synchronized Reserve:

“Non-Synchronized Reserve” shall mean the reserve capability of non-emergency generation resources that can be converted fully into energy within ten minutes of a request from the Office of the Interconnection dispatcher, and is provided by equipment that is not electrically synchronized to the Transmission System.

Non-Synchronized Reserve Event:

“Non-Synchronized Reserve Event” shall mean a request from the Office of the Interconnection to generation resources able and assigned to provide Non-Synchronized Reserve in one or more specified Reserve Zones or Reserve Sub-zones, within ten minutes to increase the energy output by the amount of assigned Non-Synchronized Reserve capability.

Non-Variable Loads:

“Non-Variable Loads” shall have the meaning specified in Operating Agreement, Schedule 1, section 1.5A.6, and the parallel provisions of Tariff, Attachment K-Appendix.

Non-Zone Network Load:

“Non-Zone Network Load shall mean Network Load that is located outside of the PJM Region.

Normal Maximum Generation:

“Normal Maximum Generation” shall mean the highest output level of a generating resource under normal operating conditions.

Normal Minimum Generation:

“Normal Minimum Generation” shall mean the lowest output level of a generating resource under normal operating conditions.

Definitions – O – P - Q

Obligation:

“Obligation” shall mean all amounts owed to PJM Settlement for purchases from the PJM Markets, Transmission Service, (under both Tariff, Part II and Part III), and other services or obligations pursuant to the Agreements. In addition, aggregate amounts that will be owed to PJM Settlement in the future for capacity purchases within the PJM capacity markets will be added to this figure. Should other markets be formed such that Participants may incur future Obligations in those markets, then the aggregate amount of those Obligations will also be added to the Net Obligation.

Offer Data:

“Offer Data” shall mean the scheduling, operations planning, dispatch, new resource, and other data and information necessary to schedule and dispatch generation resources and Demand Resource(s) for the provision of energy and other services and the maintenance of the reliability and security of the Transmission System in the PJM Region, and specified for submission to the PJM Interchange Energy Market for such purposes by the Office of the Interconnection.

Office of the Interconnection:

“Office of the Interconnection” shall mean the employees and agents of PJM Interconnection, L.L.C. subject to the supervision and oversight of the PJM Board, acting pursuant to the Operating Agreement.

Office of the Interconnection Control Center:

“Office of the Interconnection Control Center” shall mean the equipment, facilities and personnel used by the Office of the Interconnection to coordinate and direct the operation of the PJM Region and to administer the PJM Interchange Energy Market, including facilities and equipment used to communicate and coordinate with the Market Participants in connection with transactions in the PJM Interchange Energy Market or the operation of the PJM Region.

On-Site Generators:

“On-Site Generators” shall mean generation facilities (including Behind The Meter Generation) that (i) are not Capacity Resources, (ii) are not injecting into the grid, (iii) are either synchronized or non-synchronized to the Transmission System, and (iv) can be used to reduce demand for the purpose of participating in the PJM Interchange Energy Market.

Open Access Same-Time Information System (OASIS):

“Open Access Same-Time Information System” or “OASIS” shall mean the information system and standards of conduct contained in Part 37 and Part 38 of the Commission’s regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS.

Operating Agreement of the PJM Interconnection, L.L.C. or Operating Agreement:

“Operating Agreement of the PJM Interconnection, L.L.C.” or “Operating Agreement” shall mean that agreement dated as of April 1, 1997 and as amended and restated as of June 2, 1997, including all Schedules, Exhibits, Appendices, addenda or supplements hereto, as amended from time to time thereafter, among the Members of the PJM Interconnection, L.L.C.

Operating Day:

“Operating Day” shall mean the daily 24 hour period beginning at midnight for which transactions on the PJM Interchange Energy Market are scheduled.

Operating Margin:

“Operating Margin” shall mean the incremental adjustments, measured in megawatts, required in PJM Region operations in order to accommodate, on a first contingency basis, an operating contingency in the PJM Region resulting from operations in an interconnected Control Area. Such adjustments may result in constraints causing Transmission Congestion Charges, or may result in Ancillary Services charges pursuant to the PJM Tariff.

Operating Margin Customer:

“Operating Margin Customer” shall mean a Control Area purchasing Operating Margin pursuant to an agreement between such other Control Area and the LLC.

Operationally Deliverable:

“Operationally Deliverable” shall mean, as determined by the Office of the Interconnection, that there are no operational conditions, arrangements or limitations experienced or required that threaten, impair or degrade effectuation or maintenance of deliverability of capacity or energy from the external Generation Capacity Resource to loads in the PJM Region in a manner comparable to the deliverability of capacity or energy to such loads from Generation Capacity Resources located inside the metered boundaries of the PJM Region, including, without limitation, an identified need by an external Balancing Authority Area for a remedial action scheme or manual generation trip protocol, transmission facility switching arrangements that would have the effect of radializing load, or excessive or unacceptable frequency of regional reliability limit violations or (outside an interregional agreed congestion management process) of local reliability dispatch instructions and commitments.

Opportunity Cost:

“Opportunity Cost” shall mean a component of the Market Seller Offer Cap calculated in accordance with Tariff, Attachment DD, section 6.

OPSI Advisory Committee:

“OPSI Advisory Committee” shall mean the committee established under Tariff, Attachment M, section III.G.

Option to Build:

“Option to Build” shall mean the option of the New Service Customer to build certain Customer-Funded Upgrades, as set forth in, and subject to the terms of, the Construction Service Agreement.

Optional Interconnection Study:

“Optional Interconnection Study” shall mean a sensitivity analysis of an Interconnection Request based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

Optional Interconnection Study Agreement:

“Optional Interconnection Study Agreement” shall mean the form of agreement for preparation of an Optional Interconnection Study, as set forth in Attachment N-3 of the Tariff.

Part I:

“Part I” shall mean the Tariff Definitions and Common Service Provisions contained in sections 1 through 12A.

Part II:

“Part II” shall mean the Tariff sections 13 through 27A pertaining to Point-To-Point Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

Part III:

“Part III” shall mean the Tariff, sections 28 through 35 pertaining to Network Integration Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

Part IV:

“Part IV” shall mean the Tariff, sections 36 through 112C pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

Part V:

“Part V” shall mean the Tariff, sections 113 through 122 pertaining to the deactivation of generating units in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

Part VI:

“Part VI” shall mean the Tariff, sections 200 through 237 pertaining to the queuing, study, and agreements relating to New Service Requests, and the rights associated with Customer-Funded Upgrades in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

Participant:

“Participant” shall mean a Market Participant and/or Transmission Customer and/or Applicant requesting to be an active Market Participant and/or Transmission Customer.

Parties:

“Parties” shall mean the Transmission Provider, as administrator of the Tariff, and the Transmission Customer receiving service under the Tariff. PJMSettlement shall be the Counterparty to Transmission Customers.

Peak-Hour Dispatch:

“Peak-Hour Dispatch” shall mean, for purposes of calculating the Energy and Ancillary Services Revenue Offset under Tariff, Attachment DD, section 5, an assumption, as more fully set forth in the PJM Manuals, that the Reference Resource is committed in the Day-Ahead Energy Market in four distinct blocks of four hours of continuous output for each block from the peak-hour period beginning with the hour ending 0800 EPT through to the hour ending 2300 EPT for any day when the average day-ahead LMP for the area for which the Net Cost of New Entry is being determined is greater than, or equal to, the cost to generate (including the cost for a complete start and shutdown cycle) for at least two hours during each four-hour block, where such blocks shall be assumed to be committed independently; provided that, if there are not at least two economic hours in any given four-hour block, then the Reference Resource shall be assumed not to be committed for such block; and to the extent not committed in any such block in the Day-Ahead Energy Market under the above conditions based on Day-Ahead LMPs, is dispatched in the Real-Time Energy Market for such block if the Real-Time LMP is greater than or equal to the cost to generate under the same conditions as described above for the Day-Ahead Energy Market.

Peak Market Activity:

“Peak Market Activity” shall mean a measure of exposure for which credit is required, involving peak exposures in rolling three-week periods over a year timeframe, with two semi-annual reset points, pursuant to provisions of Tariff, Attachment Q, section V.A. Peak Market Activity shall exclude FTR Net Activity, Virtual Transactions Net Activity, and Export Transactions Net Activity.

Peak Season:

“Peak Season” shall mean the weeks containing the 24th through 36th Wednesdays of the calendar year. Each such week shall begin on a Monday and end on the following Sunday, except for the week containing the 36th Wednesday, which shall end on the following Friday.

Percentage Internal Resources Required:

“Percentage Internal Resources Required” shall have the meaning specified in the Reliability Assurance Agreement.

Performance Assessment *Interval*:

“Performance Assessment *Interval*” shall mean each *Real-time Settlement Interval* for which an Emergency Action has been declared by the Office of the Interconnection, provided, however, that Performance Assessment *Intervals* for a Base Capacity Resource shall not include any *intervals* outside the calendar months of June through September.

PJM:

“PJM” shall mean PJM Interconnection, L.L.C., including the Office of the Interconnection as referenced in the PJM Operating Agreement.

PJM Administrative Service:

“PJM Administrative Service” shall mean the services provided by PJM pursuant to Tariff, Schedule 9.

PJM Board:

“PJM Board” shall mean the Board of Managers of the LLC, except when such term is being used in Attachment M of the Tariff, in which case PJM Board shall mean the Board of Managers of PJM or its designated representative, exclusive of any members of PJM Management.

PJM Control Area:

“PJM Control Area” shall mean the Control Area that is recognized by NERC as the PJM Control Area.

PJM Entities:

“PJM Entities” shall mean PJM, including the Market Monitoring Unit, the PJM Board, and PJM’s officers, employees, representatives, advisors, contractors, and consultants.

PJM Interchange:

“PJM Interchange” shall mean the following, as determined in accordance with the Schedules to the Tariff: (a) for a Market Participant that is a Network Service User, the amount by which its *interval* Equivalent Load exceeds, or is exceeded by, the sum of the *interval* outputs of its operating generating resources; or (b) for a Market Participant that is not a Network Service User, the amount of its Spot Market Backup; or (c) the *interval* scheduled deliveries of Spot Market Energy by a Market Seller from an External Resource; or (d) the *interval* net metered output of any other Market Seller; or (e) the *interval* scheduled deliveries of Spot Market Energy to an External Market Buyer; or (f) the *interval* scheduled deliveries to an Internal Market Buyer that is not a Network Service User.

PJM Interchange Energy Market:

“PJM Interchange Energy Market” shall mean the regional competitive market administered by the Transmission Provider for the purchase and sale of spot electric energy at wholesale interstate commerce and related services, as more fully set forth in Operating Agreement, Schedule 1, and the parallel provisions of Tariff, Attachment K – Appendix.

PJM Interchange Export:

“PJM Interchange Export” shall mean the following, as determined in accordance with the Schedules to the Tariff: (a) for a Market Participant that is a Network Service User, the amount by which its *interval* Equivalent Load is exceeded by the sum of the *interval* outputs of its operating generating resources; or (b) for a Market Participant that is not a Network Service User, the amount of its Spot Market Backup sales; or (c) the *interval* scheduled deliveries of Spot Market Energy by a Market Seller from an External Resource; or (d) the *interval* net metered output of any other Market Seller.

PJM Interchange Import:

“PJM Interchange Import” shall mean the following, as determined in accordance with the Schedules to the Tariff: (a) for a Market Participant that is a Network Service User, the amount by which its *interval* Equivalent Load exceeds the sum of the *interval* outputs of its operating generating resources; or (b) for a Market Participant that is not a Network Service User, the amount of its Spot Market Backup purchases; or (c) the *interval* scheduled deliveries of Spot Market Energy to an External Market Buyer; or (d) the *interval* scheduled deliveries to an Internal Market Buyer that is not a Network Service User.

PJM Liaison:

“PJM Liaison” shall mean the liaison established under Tariff, Attachment M, section III.I.

PJM Management:

“PJM Management” shall mean the officers, executives, supervisors and employee managers of PJM.

PJM Manuals:

“PJM Manuals” shall mean the instructions, rules, procedures and guidelines established by the Office of the Interconnection for the operation, planning, and accounting requirements of the PJM Region and the PJM Interchange Energy Market.

PJM Markets:

“PJM Markets” shall mean the PJM Interchange Energy and capacity markets, including the RPM auctions, together with all bilateral or other wholesale electric power and energy transactions, capacity transactions, ancillary services transactions (including black start service), transmission transactions and any other market operated under the PJM Tariff or Operating Agreement within the PJM Region, wherein Market Participants may incur Obligations to PJM Settlement.

PJM Market Rules:

“PJM Market Rules” shall mean the rules, standards, procedures, and practices of the PJM Markets set forth in the PJM Tariff, the PJM Operating Agreement, the PJM Reliability Assurance Agreement, the PJM Consolidated Transmission Owners Agreement, the PJM Manuals, the PJM Regional Practices Document, the PJM-Midwest Independent Transmission System Operator Joint Operating Agreement or any other document setting forth market rules.

PJM Net Assets:

“PJM Net Assets” shall mean the total assets per PJM’s consolidated quarterly or year-end financial statements most recently issued as of the date of the receipt of written notice of a claim less amounts for which PJM is acting as a temporary custodian on behalf of its Members, transmission developers/Designated Entities, and generation developers, including, but not limited to, cash deposits related to credit requirement compliance, study and/or interconnection receivables, member prepayments, invoiced amounts collected from Net Buyers but have not yet been paid to Net Sellers, and excess congestion (as described in Operating Agreement, Schedule 1, section 5.2.6, and the parallel provisions of Tariff, Attachment K-Appendix).

PJM Open Access Transmission Tariff (“O.A.T.T.”):

“PJM Open Access Transmission Tariff” or “O.A.T.T” shall mean the Open Access Transmission Tariff of PJM Interconnection, L.L.C., on file with the Federal Energy Regulatory Commission, and as revised from time to time.

PJM Open Access Same-time Information System:

“PJM Open Access Same-time Information System” shall mean the electronic communication system for the collection and dissemination of information about transmission services in the

PJM Region, established and operated by the Office of the Interconnection in accordance with FERC standards and requirements.

PJM Operating Agreement:

“PJM Operating Agreement” shall mean the Amended and Restated Operating Agreement of PJM on file with the Commission.

PJM Region:

“PJM Region” shall have the meaning specified in the Operating Agreement.

PJM Regional Practices Document:

“PJM Regional Practices Document” shall mean the document of that title that compiles and describes the practices in the PJM Markets and that is made available in hard copy and on the Internet.

PJM Region Installed Reserve Margin:

“PJM Region Installed Reserve Margin” shall have the meaning specified in the Operating Agreement.

PJM Region Peak Load Forecast:

“PJM Region Peak Load Forecast” shall mean the peak load forecast used by the Office of the Interconnection in determining the PJM Region Reliability Requirement, and shall be determined on both a preliminary and final basis as set forth in Tariff, Attachment DD, section 5.

PJM Region Reliability Requirement:

“PJM Region Reliability Requirement” shall mean, for purposes of the Base Residual Auction, the Forecast Pool Requirement multiplied by the Preliminary PJM Region Peak Load Forecast, less the sum of all Preliminary Unforced Capacity Obligations of FRR Entities in the PJM Region; and, for purposes of the Incremental Auctions, the Forecast Pool Requirement multiplied by the updated PJM Region Peak Load Forecast, less the sum of all updated Unforced Capacity Obligations of FRR Entities in the PJM Region.

PJM Reliability Assurance Agreement:

“PJM Reliability Assurance Agreement” shall mean the Reliability Assurance Agreement among Load Serving Entities in the PJM Region on file with the Commission.

PJM Settlement:

“PJM Settlement” or “PJM Settlement, Inc.” shall mean PJM Settlement, Inc. (or its successor), established by PJM as set forth in Section 3.3 of the Operating Agreement.

PJM Tariff:

“PJM Tariff” or “Tariff shall mean that certain “PJM Open Access Transmission Tariff”, including any schedules, appendices or exhibits attached thereto, on file with FERC and as amended from time to time thereafter.

PJM Transmission Owners Agreement:

“PJM Transmission Owners Agreement” shall mean the PJM Consolidated Transmission Owners Agreement on file with the Commission.

Plan:

“Plan” shall mean the PJM market monitoring plan set forth in Tariff, Attachment M.

Planned Demand Resource:

“Planned Demand Resource” shall have the meaning specified in the Reliability Assurance Agreement.

Planned External Financed Generation Capacity Resource:

“Planned External Financed Generation Capacity Resource” shall mean a Planned External Generation Capacity Resource that, prior to August 7, 2015, has an effective agreement that is the equivalent of an Interconnection Service Agreement, has submitted to the Office of the Interconnection the appropriate certification attesting achievement of Financial Close, and has secured at least 50 percent of the MWs of firm transmission service required to qualify such resource under the deliverability requirements of the Reliability Assurance Agreement.

Planned External Generation Capacity Resource:

“Planned External Generation Capacity Resource” shall have the meaning specified in the Reliability Assurance Agreement.

Planned Financed Generation Capacity Resource:

“Planned Financed Generation Capacity Resource” shall mean a Planned Generation Capacity Resource that, prior to August 7, 2015, has an effective Interconnection Service Agreement and has submitted to the Office of the Interconnection the appropriate certification attesting achievement of Financial Close.

Planned Generation Capacity Resource:

“Planned Generation Capacity Resource” shall have the meaning specified in the Reliability Assurance Agreement.

Planning Period:

“Planning Period” shall have the meaning specified in the Reliability Assurance Agreement.

Planning Period Balance:

“Planning Period Balance” shall mean the entire period of time remaining in the Planning Period following the month that a monthly auction is conducted.

Planning Period Quarter:

“Planning Period Quarter” shall mean any of the following three month periods in the Planning Period: June, July and August; September, October and November; December, January and February; or March, April and May.

Point(s) of Delivery:

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

Point of Interconnection:

“Point of Interconnection” shall mean the point or points, ~~shown in the appropriate appendix to the Interconnection Service Agreement and the Interconnection Construction Service Agreement,~~ where the Customer Interconnection Facilities interconnect with the Transmission Owner Interconnection Facilities or the Transmission System.

Point(s) of Receipt:

“Point(s) of Receipt” shall mean point(s) of interconnection on the Transmission Provider’s Transmission System where capacity and energy will be made available to the Transmission Provider by the Delivering Party under Tariff, Part II. The Point(s) of Receipt shall be specified in the Service Agreement for Long-Term Firm Point-To-Point Transmission Service.

Point-To-Point Transmission Service:

“Point-To-Point Transmission Service shall mean the reservation and transmission of capacity and energy on either a firm or non-firm basis from the Point(s) of Receipt to the Point(s) of Delivery under Tariff, Part II.

Power Purchaser:

“Power Purchaser” shall mean the entity that is purchasing the capacity and energy to be transmitted under the Tariff.

PRD Curve:

“PRD Curve” shall have the meaning provided in the Reliability Assurance Agreement.

PRD Provider:

“PRD Provider” shall have the meaning provided in the Reliability Assurance Agreement.

PRD Reservation Price:

“PRD Reservation” Price shall have the meaning provided in the Reliability Assurance Agreement.

PRD Substation:

“PRD Substation” shall have the meaning provided in the Reliability Assurance Agreement.

Pre-Confirmed Application:

“Pre-Confirmed Application” shall be an Application that commits the Eligible Customer to execute a Service Agreement upon receipt of notification that the Transmission Provider can provide the requested Transmission Service.

Pre-Emergency Load Response Program:

“Pre-Emergency Load Response Program” shall be the program by which Curtailment Service Providers may be compensated by PJM for Demand Resources that will reduce load when dispatched by PJM during pre-emergency conditions, and is described in Section 8 of Schedule 1 of the Operating Agreement and the parallel provisions of Section 8 of Attachment K-Appendix of the Tariff.

Pre-Expansion PJM Zones:

“Pre-Expansion PJM Zones” shall be zones included in the Tariff, along with applicable Schedules and Attachments, for certain Transmission Owners – Atlantic City Electric Company, Baltimore Gas and Electric Company, Delmarva Power and Light Company, Jersey Central Power and Light Company, Mid-Atlantic Interstate Transmission, LLC (“MAIT”) (MAIT owns and operates the transmission facilities in the Metropolitan Edison Company Zone and the Pennsylvania Electric Company Zone), PECO Energy Company, Pennsylvania Power & Light Group, Potomac Electric Power Company, Public Service Electric and Gas Company, Allegheny Power, and Rockland Electric Company.

Price Responsive Demand:

“Price Responsive Demand” shall have the meaning provided in the Reliability Assurance Agreement.

Primary Reserve:

“Primary Reserve” shall mean the total reserve capability of generation resources that can be converted fully into energy or Demand Resources whose demand can be reduced within ten minutes of a request from the Office of the Interconnection dispatcher, and is comprised of both Synchronized Reserve and Non-Synchronized Reserve.

Primary Reserve Alert

“Primary Reserve Alert” shall mean a notification from PJM to alert Members of an anticipated shortage of Operating Reserve capacity for a future critical period.

Primary Reserve Requirement:

“Primary Reserve Requirement” shall mean the megawatts required to be maintained in a Reserve Zone or Reserve Sub-zone as Primary Reserve, absent any increase to account for additional reserves scheduled to address operational uncertainty. The Primary Reserve Requirement is calculated in accordance with the PJM Manuals.

Prior CIL Exception External Resource:

“Prior CIL Exception External Resource” shall mean an external Generation Capacity Resource for which (1) a Capacity Market Seller had, prior to May 9, 2017, cleared a Sell Offer in an RPM Auction under the exception provided to the definition of Capacity Import Limit as set forth in Article I of the Reliability Assurance Agreement or (2) an FRR Entity committed, prior to May 9, 2017, in an FRR Capacity Plan under the exception provided in the definition of Capacity Import Limit. In the event only a portion (in MW) of an external Generation Capacity Resource has a Pseudo-Tie into the PJM Region, that portion of the external Generation Capacity Resource, which can include up to the maximum megawatt amount cleared in any prior RPM auction or committed in an FRR Capacity Plan (and no other portion thereof) is eligible for treatment as a Prior CIL Exception External Resource if such portion satisfies the requirements of the first sentence of this definition.

Project Financing:

“Project Financing” shall mean: (a) one or more loans, leases, equity and/or debt financings, together with all modifications, renewals, supplements, substitutions and replacements thereof, the proceeds of which are used to finance or refinance the costs of the Customer Facility, any alteration, expansion or improvement to the Customer Facility, the purchase and sale of the Customer Facility or the operation of the Customer Facility; (b) a power purchase agreement pursuant to which Interconnection Customer’s obligations are secured by a mortgage or other lien on the Customer Facility; or (c) loans and/or debt issues secured by the Customer Facility.

Project Finance Entity:

“Project Finance Entity” shall mean: (a) a holder, trustee or agent for holders, of any component of Project Financing; or (b) any purchaser of capacity and/or energy produced by the Customer Facility to which Interconnection Customer has granted a mortgage or other lien as security for some or all of Interconnection Customer’s obligations under the corresponding power purchase agreement.

Projected PJM Market Revenues:

“Projected PJM Market Revenues” shall mean a component of the Market Seller Offer Cap calculated in accordance with Tariff, Attachment DD, section 6.

Proportional Multi-Driver Project:

“Proportional Multi-Driver Project” shall have the same meaning provided in the Operating Agreement.

Pseudo-Tie:

“Pseudo-Tie” shall have the same meaning provided in the Operating Agreement.

Public Policy Objectives:

“Public Policy Objectives” shall have the same meaning provided in the Operating Agreement.

Public Policy Requirements:

“Public Policy Requirements” shall have the same meaning provided in the Operating Agreement.

Qualifying Transmission Upgrade:

“Qualifying Transmission Upgrade” shall mean a proposed enhancement or addition to the Transmission System that: (a) will increase the Capacity Emergency Transfer Limit into an LDA by a megawatt quantity certified by the Office of the Interconnection; (b) the Office of the Interconnection has determined will be in service on or before the commencement of the first Delivery Year for which such upgrade is the subject of a Sell Offer in the Base Residual Auction; (c) is the subject of a Facilities Study Agreement executed before the conduct of the Base Residual Auction for such Delivery Year and (d) a New Service Customer is obligated to fund through a rate or charge specific to such facility or upgrade.

Queue Position:

“Queue Position” shall mean the priority assigned to an Interconnection Request, a Completed Application, or an Upgrade Request pursuant to applicable provisions of Tariff, Part VI.

36.2A Modification of Interconnection Request:

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

The following language for 36.2A.1 and 36.2A.2 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.2 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 output (MW) (in the case of

a Generation Interconnection Request) 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 section 36.2A.6. The Interconnection Customer may reduce its project by up to 15 percent of the electrical output (MW) (in the case of a Generation Interconnection Request) 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 output (MW) (in the case of a Generation Interconnection Request) 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 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.2, subject to the limitation described in section 36.2A.6. The Interconnection Customer may reduce its project by the greater of 10 MW or 5 percent of the electrical output (MW) (in the case of a Generation Interconnection Request) 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 output (MW) (in the case of a Generation Interconnection Request) 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.3

Prior to making any modifications other than those specifically permitted by Sections 36.2A.1, 36.2A.2 and 36.2A.5, the Interconnection Customer may first request that the Transmission Provider evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the Transmission Provider shall evaluate the proposed modifications prior to making them and shall inform the Interconnection Customer in writing of whether the modification(s) would constitute a Material Modification. For purposes of this Section 36.2A.3, any change to the Point of Interconnection (other than a change deemed acceptable under Sections 36.1.5, 36.2.1, or 36.2A.1) or increase in generating capacity shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

36.2A.4

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

36.2A.5

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

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.6

An Interconnection Customer may be assigned a new queue position as provided for in sections 36.2A.1.2 or 36.2A.2 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 sections 36.2A.1 .2 or 36.2A.2, then the Interconnection Request shall be terminated and withdrawn if the Interconnection Customer proceeds with such change.

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~~ must return the executed 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 Section 204.3A of the Tariff. In some cases, where no network impacts are identified and there are no other projects in the vicinity of the small resource addition, the System Impact Study may not be required and the project will proceed directly to the Facilities Study.

110.3 System Impact Study

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

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 ~~must return the executed~~ 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 Part VI, Section 206. Transmission Provider will utilize the procedures set forth in Part VI, 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 Part VI, 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.

~~In some cases, the Interconnection Customer and Transmission Provider may reach agreement allowing the Interconnection Customer to separately arrange for the design of some of the required transmission facilities. In such cases, facilities design will be reviewed, under the Facilities Study Agreement, by the Interconnected Transmission Owner.~~

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

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~~ must return the executed 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 Section 204.3A of the Tariff. In some cases, where no network impacts are identified and there are no other projects in the vicinity of the small resource addition, the System Impact Study may not be required and the project will proceed directly to the Facilities Study.

111.3 System Impact Study

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

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

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

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

Once the System Impact Study is completed, a System Impact Study report will be prepared and transmitted to the Interconnection Customer along with a Facilities Study Agreement. In order to remain in the New Services Queue, the Interconnection Customer shall execute the ~~must return the executed~~ 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 Part VI, Section 206. Transmission Provider will utilize the procedures set forth in Part VI, 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 Part VI, 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. ~~In some cases, the Interconnection Customer and Transmission Provider may reach agreement allowing the Interconnection Customer to separately arrange for the design of some of the required transmission facilities. In such cases, facilities design will be reviewed, under the Facilities Study Agreement, by the Interconnected Transmission Owner.~~

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

112A.3 Results of Screens

112A.3.1 If the proposed interconnection passes the screens set forth in section ~~112A.1~~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.1~~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.1~~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.

204.1 Completed Applications:

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

204.3 Interconnection Requests:

Upon completion of the Interconnection Feasibility Study, the Transmission Provider shall tender to the affected Interconnection Customer a System Impact Study Agreement. For an Interconnection Request to retain its assigned Queue Position pursuant to Section 201, within 30 days of receiving the tendered System Impact Study Agreement, the Interconnection Customer (i) shall execute the System Impact Study Agreement and ~~return it to it~~ **must be received by** the Transmission Provider, (ii) shall remit to Transmission Provider all past due amounts of the actual Feasibility Study costs exceeding the Feasibility Study deposit fee contained in Sections 36.1.02, 36.1.03, 110.1, 111.1, and 112.1 of the Tariff, if any, (iii) shall pay the Transmission Provider a deposit as provided in 204.3A below, (iv) shall identify the Point(s) of Interconnection, and (v) in the case of a Generation Interconnection Customer, shall (A) demonstrate that it has made an initial application for the necessary air emission permits, if any, for its proposed generation, (B) specify whether it desires to interconnect its generation to the Transmission System as a Capacity Resource or an Energy Resource, (C) provide required machine modeling data as specified in the PJM Manuals, (D) in the case of a wind generation facility, provide a detailed electrical design specification and other data (including system layout data) as required by the Transmission Provider for completion of the System Impact Study ~~no later than 6 months after submission of the Generation Interconnection Request~~, and (E) notify the Transmission Provider if it seeks to use Capacity Interconnection Rights in accordance with Section 230.3.3; or, (vi) in the case of a Transmission Interconnection Customer, shall (A) provide Transmission Provider with evidence of an ownership interest in, or right to acquire or control, the site(s) where major equipment (e.g., a new transformer or D.C. converter stations) would be installed, such as a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider; (B) demonstrate in a manner acceptable to Transmission Provider that it holds rights to use (or an option to obtain such rights) any existing facilities of the Transmission System that are necessary for construction of the proposed Merchant Transmission Facilities; and (C) provide required modeling data as specified in the PJM Manuals. If an Interconnection Customer fails to comply with any of the applicable listed requirements, its Interconnection Request shall be deemed terminated and withdrawn, however in the event that the information required per (v) (C), (v) (D), or (vi) (C) above is provided and deemed to be deficient by the Transmission Provider, Interconnection Customer may provide additional information acceptable to the Transmission Provider within 10 Business Days. Failure of the Interconnection Customer to provide information identified as being deficient within 10 Business Days shall result in the Interconnection Request being terminated and withdrawn. If a terminated and withdrawn Interconnection Request was to be included in a System Impact Study evaluating more than one New Service Request, then the costs of the System Impact Study shall be redetermined and reallocated among the remaining participating New Service Customers as specified in this Section 204.

204.3A Deposits for Interconnection Customers

1. Provided that the maximum total deposit amount for a System Impact Study shall be \$300,000 regardless of the size of the proposed Customer Facility, a System Impact Study deposit shall be submitted to Transmission Provider, as follows:

- a. For a proposed Customer Facility that is 20 MW or greater, a deposit of \$500 for each MW requested; or
 - b. For a proposed Customer Facility that is 2 MW or greater, but less than 20 MW, a deposit of \$10,000; or
 - c. For a proposed Customer Facility that is less than 2 MW, a deposit of \$5,000.
2. 10% of each total System Impact Study 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 Interconnection Requests by the Interconnection Customer.
3. 90% of each total System Impact Study deposit amount is refundable, and the Transmission Provider shall utilize, in no particular order, the refundable portion of each total System Impact Study deposit amount to cover the following:
- a. The cost of the System Impact Study acceptance review; and
 - b. The dollar amount of the Interconnection Customer's cost responsibility for the System Impact Study; and
 - c. If the System Impact Study Request is deemed to be modified (pursuant to Section 36.2A of the Tariff), rejected, terminated and/or withdrawn during the deficiency review and/or deficiency response period, as described further below, or during the System Impact 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 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, rejection, termination and/or withdrawal of such 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 System Impact Study 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 Interconnection Requests by such 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 customer in accordance with the PJM Manuals.
4. Upon completion of the System Impact Study, the Transmission Provider shall apply any remaining refundable deposit monies toward:
 - a. The cost responsibility of the Interconnection Customer for any other studies conducted for the Interconnection Request; and/or
 - b. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Interconnection Requests by such Interconnection Customer.
5. If any refundable deposit monies remain after the System Impact 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 Interconnection Requests by such 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 System Impact Study Request. If the Interconnection Customer fails to submit the total required deposit amount with the System Impact Study Request, the System Impact Study Request shall be deemed to be terminated and withdrawn.

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

206.2 Retaining Queue Position:

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

206.3 Deposit:

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

212.1 Cost Reimbursement:

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

212.4 Retaining Priority and Security:

(a) Retaining Priority: To retain the assigned Queue Position of its Interconnection Request pursuant to Section 201, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the Interconnection Customer must have executed and return the tendered Interconnection Service Agreement and it must be in the possession of ~~to~~ the Transmission Provider or, alternatively, request (i) dispute resolution under Section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or (ii) that the Interconnection Service Agreement be filed unexecuted with the Commission. In addition, to retain the assigned priority, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the Interconnection Customer must have met the milestones specified in Section 212.5.

(b) Security: (1) At the time the Interconnection Customer executes and returns to the Transmission Provider the Interconnection Service Agreement (or requests dispute resolution or that it be filed unexecuted), the Interconnection Customer also shall, unless otherwise deferred as set forth in subsection (c) below, provide the Transmission Provider (for the benefit of the affected Transmission Owner(s)) with a letter of credit or other reasonable form of security acceptable to the Transmission Provider that names the Transmission Provider as beneficiary and is in an amount equivalent to the sum of the estimated costs determined by the Transmission Provider of (i) the required Non-Direct Connection Local Upgrades and Non-Direct Connection Network Upgrades, (ii) any Network Upgrades that the Interconnected Transmission Owner will be responsible for constructing (including with respect to both items (i) and (ii) required upgrades for which another Interconnection Customer also has cost responsibility pursuant to Section 217), and either (iii) the estimated cost of the work that the Transmission Owner will be responsible for performing on the required Attachment Facilities, Direct Connection Local Upgrades, and Direct Connection Network Upgrades that are scheduled to be completed during the first three months after such work commences in earnest, or (iv) in the event that the Interconnection Customer exercises the Option to Build pursuant to Section 3.2.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P to the Tariff), all Cancellation Costs and the first three months of estimated Transmission Owner's Costs associated with the Interconnection Customer's building Attachment Facilities, Direct Connection Local Upgrades, and/or Direct Connection Network Upgrades, including but not limited to Costs for tie-in work, consistent with commercial practices as established by the Uniform Commercial Code. Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities to satisfy itself that the Interconnection Customer is complying with the Transmission Owner's standards and specifications for the construction of facilities) only if the Transmission Owner and the Interconnection Customer mutually agree to the inclusion of such costs under the Option to Build pursuant to the provisions of Section 3.2.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P of the Tariff). Notwithstanding the foregoing, for projects that are estimated to require three months or less to construct, the sum of such security and the payment for the first quarterly invoice for the project shall not exceed an amount equal to 125% of the total estimated cost of construction. The Transmission Provider shall provide the affected Transmission Owner(s) with a copy of the letter

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

(2) Transmission Provider shall invoice Interconnection Customer for work by the Interconnected Transmission Owner and Transmission Provider on a quarterly basis for the costs to be expended in the subsequent three months. Interconnection Customer shall pay invoiced amounts within twenty (20) days of receipt of the invoice. Interconnection Customer may request in the Interconnection Service Agreement that the Transmission Provider provide a quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Section 11.2.3 of Appendix 2 of the Interconnection Service Agreement shall govern the timing of the final cost reconciliation upon completion of the work.

(3) Transmission Provider shall hold the security related to construction ~~of Attachment Facilities~~ until as-built drawings are received and settlement of the final invoice; security related to construction ~~of Local Upgrades and/or Network Upgrades~~ may be reduced as construction progresses.

(c) **Deferred Security:** Interconnection Customer may request to defer providing security under subsection (b) of this Section 212.4 until no later than 120 days after Interconnection Customer executes the Interconnection Service Agreement. Upon Interconnection Customer's request to defer security, PJM shall determine if any other queued New Service Customer with a completed System Impact Study would require any Local Upgrade(s) and/or Network Upgrade(s) for which Interconnection Customer has cost responsibility under the Interconnection Service Agreement. Interconnection Customer may defer security only for Local Upgrade(s) and/or Network Upgrade(s) for which no other such queued New Service Customer may require, provided Interconnection Customer shall pay a deposit of at least \$200,000 or 125% of the estimated costs that will be incurred during the 120-day period, whichever is greater, to fund continued design work and/or procurement activities on such non-shared Local Upgrade(s) and/or Network Upgrade(s), with \$100,000 of such deposit being non-refundable. If the Interconnection Customer terminates the Interconnection Service Agreement or is otherwise withdrawn, any unused portion of the non-refundable deposit will be used to fund re-studies due to such termination or withdrawal. Any remaining deposit monies, refundable or non-refundable, will be returned to an Interconnection Customer upon Initial Operation.

(d) **Withdrawal:** If an Interconnection Customer fails to timely execute the Interconnection Service Agreement (or request dispute resolution or that the agreement be filed unexecuted), meet the milestones (unless extended) set forth in Section 212.5, or provide the security prescribed in this Section 212.4, its Interconnection Request shall be deemed terminated and withdrawn. In the event that a terminated and withdrawn Interconnection Request was included in a Facilities Study that evaluated more than one New Service Request, or in the event that a New Service Customer's participation in and cost responsibility for a Network Upgrade or Local Upgrade is terminated in accordance with Subpart C of Part VI of the Tariff, the Transmission Provider shall reevaluate the need for the facilities and upgrades indicated by the Facilities

Study, shall re-determine the cost responsibility of each remaining New Service Customer for the necessary facilities and upgrades based on its assigned priority pursuant to Section 201, and shall enter into an amended Interconnection Service Agreement with each remaining Interconnection Customer setting forth its revised cost obligation. In such event, if the amount of an Interconnection Customer's cost responsibility increases, the Interconnection Customer shall provide additional security pursuant to this Section 212.4.

212.6 Interconnection Construction Service Agreement and Commencement of Construction:

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

213.1 Cost Reimbursement:

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

213.4 Retaining Priority and Security:

(a) Retaining Priority: To retain the assigned Queue Position of its New Service Request pursuant to Section 201, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the New Service Customer ~~either shall have must-executed and return~~ the tendered Upgrade Construction Service Agreement ~~and it must be in possession of to~~ the Transmission Provider or, alternatively, request (i) dispute resolution under Section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or (ii) that the Upgrade Construction Service Agreement be filed unexecuted with the Commission.

(b) Security: (1) At the time the New Service Customer executes and returns to the Transmission Provider the Upgrade Construction Service Agreement (or requests dispute resolution or that it be filed unexecuted), the New Service Customer also shall, unless otherwise deferred as set forth in subsection (c) below, provide the Transmission Provider (for the benefit of the affected Transmission Owner(s)) with a letter of credit or other reasonable form of security acceptable to the Transmission Provider that names the Transmission Provider as beneficiary and is in an amount equivalent to the sum of the estimated costs determined by the Transmission Provider of (i) the required Direct Assignment Facilities, Non-Direct Connection Local Upgrades and/or Non-Direct Connection Network Upgrades (including required upgrades for which another New Service Customer also has cost responsibility pursuant to Section 217), (ii) the estimated cost of work that the New Service Customer will be responsible for performing on the required Direct Assignment Facilities, Direct Connection Local Upgrades, and/or Direct Connection Network Upgrades that are scheduled to be completed during the first three months after such work commences in earnest, and (iii) in the event that the New Service Customer exercised the Option to Build pursuant to Section 6.2.1 of Appendix III of the form of Upgrade Construction Service Agreement (set forth in Attachment GG to the Tariff), all Cancellation Costs and the first three months of estimated Transmission Owner's Costs associated with the New Service Customer's building Direct Assignment Facilities, Direct Connection Local Upgrades, and/or Direct Connection Network Upgrades, including but not limited to Costs for inspections, testing, and tie-in work, consistent with commercial practices as established by the Uniform Commercial Code. Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight ~~activities-activities~~ to satisfy itself that the New Service Customer is complying with the Transmission Owner's standards and specifications for the construction of facilities) only if the Transmission Owner and the New Service Customer mutually agree to the inclusion of such costs under the Option to Build pursuant to the provisions of Section 6.2.1 of Appendix III of the form of Upgrade Construction Service Agreement (set forth in Attachment GG of the Tariff). Notwithstanding the foregoing, for projects that are estimated to require three months or less to construct, the sum of such security and the payment for the first quarterly invoice for the project shall not exceed an amount equal to 125% of the total estimated cost of construction.

The Transmission Provider shall provide the affected Transmission Owner(s) with a copy of the letter of credit or other form of security. After execution of the Upgrade Construction Service Agreement, the amount of Security required may be adjusted from time to time in accordance with Section 9.1 of Appendix III of the Upgrade Construction Service Agreement.

(2) Transmission Provider shall invoice New Service Customer for work by the Transmission Owner on a quarterly basis for the costs to be expended in the subsequent three months. Customer shall pay invoiced amounts within twenty (20) days of receipt of the invoice. New Service Customer may request in the Upgrade Construction Service Agreement that the Transmission Provider provide a quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Section 9.3 of Appendix III of the Upgrade Construction Service Agreement shall govern the timing of the final cost reconciliation upon completion of the work.

(3) Security related to construction of Local Upgrades and/or Network Upgrades may be reduced as construction progresses.

(c) **Deferred Security:** New Service Customer may request to defer providing security under subsection (b) of this Section 213.4 until no later than 120 days after New Service Customer executes the Upgrade Construction Service Agreement. Upon New Service Customer's request to defer security, PJM shall determine if any other queued New Service Customer with a completed System Impact Study would require any Local Upgrade(s) and/or Network Upgrade(s) for which New Service Customer has cost responsibility under the Upgrade Construction Service Agreement. New Service Customer may defer security only for Local Upgrade(s) and/or Network Upgrade(s) for which no other such queued New Service Customer may require, provided New Service Customer shall pay a deposit of at least \$200,000 or 125% of the estimated costs that will be incurred during the 120-day period, whichever is greater, to fund continued design work and/or procurement activities on such non-shared Local Upgrade(s) and/or Network Upgrade(s), with \$100,000 of such deposit being non-refundable. If the New Service Customer terminates the Upgrade Construction Service Agreement or is otherwise withdrawn, any unused portion of the non-refundable deposit will be used to fund re-studies due to such termination or withdrawal. Any remaining deposit monies, refundable or non-refundable, will be returned to a New Service Customer upon Stage Two Energization of Completed Facilities.

(d) **Withdrawal:** If a New Service Customer fails to timely execute the Upgrade Construction Service Agreement (or request dispute resolution or that the agreement be filed unexecuted), or to provide the security prescribed in this Section, its New Service Request shall be deemed terminated and withdrawn. In the event that a terminated and withdrawn New Service Request was included in a Facilities Study that evaluated more than one New Service Request, or in the event that a New Service Customer's participation in and cost responsibility for a Network Upgrade or Local Upgrade is terminated in accordance with the Upgrade Construction Service Agreement, the Transmission Provider shall reevaluate the need for the facilities and upgrades indicated by the Facilities Study, shall redetermine the cost responsibility of each remaining New Service Customer for the necessary facilities and upgrades based on its assigned Queue Position pursuant to Section 201, and shall enter into an amended Interconnection Service Agreement or Upgrade Construction Service Agreement, as applicable, with each remaining New Service Customer setting forth its revised cost obligation. In such event, if the amount of a New Service

Customer's cost responsibility increases, the New Service Customer shall provide additional security pursuant to this Section.

216 Interconnection Requests Designated As Market Solutions:

The provisions of this section shall apply to any Interconnection Request related to a project that Transmission Provider determines, in accordance with Section 1.5.7(h) of Schedule 6 of the Operating Agreement could relieve a transmission constraint and which, in the judgment of the Transmission Provider, is economically justified (hereafter, a “market solution”).

217.3 Local and Network Upgrades:

(a) General: Each New Service Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Local Upgrades and Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Local Upgrades and Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Local Upgrades and Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the New Service Request; or the construction of Supplemental Projects.

(b) Cost Responsibility for Accelerating Local and Network Upgrades included in the Regional Transmission Expansion Plan: Where the New Service Request calls for accelerating the construction of a Local Upgrade or Network Upgrade that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the New Service Customer shall pay all costs that would not have been incurred under the Regional Transmission ~~Expansion~~ Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Schedule 12 of the Tariff as having cost responsibility for such Local Upgrade or Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Local Upgrade or Network Upgrade.

217.3a The Transmission Provider shall determine the minimum amount of required Local Upgrades and Network Upgrades required to resolve each reliability criteria violation in each New Services Queue, by studying the impact of the queued projects in their entirety, and not incrementally.

Local Upgrades and Network Upgrades shall be studied in their entirety and according to the following process:

(i) The Transmission Provider shall identify the first New Service Request in the queue contributing to the need for the required Local Upgrades and Network Upgrades within the New Services Queue. The initial New Service Request to cause the need for Local Upgrades or Network Upgrades will always receive a cost allocation. Costs for the minimum amount of Local Upgrades and Network Upgrades shall be further allocated to subsequent projects in the New Services Queue, pursuant to queue order, and pursuant to the New Service Request's megawatt contribution to the need for the Local Upgrades and Network Upgrades.

(ii) In the event a subsequent New Service Request in the queue causes the need for additional Local Upgrades or additional Network Upgrades, only this New Service Request and

the New Service Requests in the queue, which follow such subsequent New Service Request in the queue, shall be allocated the costs for these additional required Local Upgrades or Network Upgrades. The allocation shall be pursuant to queue order, and pursuant to the New Service Request's megawatt contribution to the need for the Local Upgrades and Network Upgrades.

Where a Local Upgrade or Network Upgrade included in the Regional Transmission Expansion Plan is classified as both a reliability-based and market efficiency project, a New Service Request cannot eliminate or defer such upgrade unless the request eliminates or defers both the reliability need and the market efficiency need identified in the Regional Transmission Expansion Plan.

**ATTACHMENT N-1
FORM OF
SYSTEM IMPACT STUDY AGREEMENT**

(PJM Queue Position #____)

RECITALS

1. This System Impact Study Agreement, dated as of _____, is entered into, by and between _____ ("New Service Customer") and PJM Interconnection, L.L.C. ("Transmission Provider") pursuant to Part VI of the PJM Interconnection, L.L.C. Open Access Transmission Tariff ("PJM Tariff").
2. The Transmission Provider has: (i) pursuant to Section 36.2 of the PJM Tariff, completed an Interconnection Feasibility Study and provided the results of that study to the New Service Customer; (ii) received a valid Upgrade Request; or (iii) pursuant to Section 19 or Section 32, as applicable, of the PJM Tariff, the Transmission Provider has completed an *Firm Transmission Feasibility* Study and provided the results of that study to the New Service Customer.
3. Pursuant to Sections 19.1, 32.1, 37, 110.2, 111.2, 204.1, 204.2, or 204.3, as applicable, of the PJM Tariff, the New Service Customer (i) requests that the Transmission Provider perform a System Impact Study, and (ii) agrees to submit a deposit of \$ _____ to the Transmission Provider which will be applied to the New Service Customer's cost responsibility for the System Impact Study, as set forth in Section 203 or 204.3A of the PJM Tariff.

PREVIOUS SUBMISSIONS

{For Interconnection Customers, use the following paragraph 4}

4. Except as otherwise specifically set forth in an attachment to this agreement, New Service Customer represents and warrants that the information provided in Section 3 of the Interconnection Feasibility Study Agreement dated _____, for the project designated _____ {insert Queue Position} by and between the New Service Customer and the Transmission Provider is accurate and complete as of the date of execution of this System Impact Study Agreement. New Service Customer further provides the following information and represents and warrants that said information is true and correct:

{For Generation Facilities, use the following paragraphs a through c}

- a. Specify whether the generation to be interconnected to the Transmission System is to be a Capacity Resource or an Energy Resource.

- b. Identification of evidence of initial application for the necessary air permits (attach documentation separately):

- c. Other information not previously provided that may be relevant to the study being conducted hereunder (attach generator data for stability study analysis):

{For Merchant Transmission Facilities, use the following paragraphs a through c}

- a. Provide evidence of ownership in, or right to acquire or control the site(s) where New Service Customer intends to install its major equipment, in the form of a deed, option agreement, lease or other similar document acceptable to PJM:

- b. Provide evidence of the rights or option to obtain such rights to use any existing transmission facilities within PJM that are necessary for construction of the proposed project.

- c. Other information not previously provided that may be relevant to the study being conducted hereunder:

{For New Service Customer other than Interconnection Customers, use the following paragraph 4}

- 4. Except as otherwise specifically set forth in an attachment to this agreement, New Service Customer represents and warrants that the information provided in Section ____ {insert applicable section number} of the New Service Request dated _____, for the request designated _____ {insert Queue Position} is accurate and complete as of the date of execution of this System Impact Study Agreement. ~~New Service Customer~~

~~further provides the following information and represents and warrants that said information is true and correct:~~

PURPOSE OF THE SYSTEM IMPACT STUDY

5. Consistent with Section 205 of the PJM Tariff, the Transmission Provider, in consultation with the affected Transmission Owner(s), shall conduct a System Impact Study that identifies the system constraints relating to the New Service Requests being evaluated in the study and the Attachment Facilities, Local Upgrades, and Network Upgrades necessary to accommodate such New Service Requests. It is expected that the System Impact Study will be completed by {insert date}. In the event that the Transmission Provider is unable to complete the System Impact Study by that date, the Transmission Provider shall notify the New Service Customer and explain the reasons for the delay.

6. The System Impact Study conducted hereunder will provide more comprehensive estimates of the cost and length of time required to accommodate the New Service Customer's New Service Request than those developed through the *Interconnection Feasibility Study*, *Upgrade Feasibility Study* or *Firm Transmission Feasibility Study*, if applicable, performed for the New Service Customer. These estimates shall represent a good faith attempt to determine the cost of necessary facilities and upgrades to accommodate the New Service Customer's New Service Request, and the New Service Customer's cost responsibility for them, but shall not be deemed final or binding. The scope of the System Impact Study {include for Merchant Transmission Facilities: may depend in part on the interconnection rights elected by the New Service Customer under Section 36.1.03 of the PJM Tariff and} may include (a) an assessment of sub-area import deliverability, (b) an assessment of sub-area export deliverability, (c) an assessment of project related system stability issues, (d) an assessment of project related short circuit duty issues, (e) a contingency analysis consistent with NERC's and each Applicable Regional Entity's reliability criteria, (f) an assessment of regional transmission upgrades that most effectively meet identified needs, and (g) an analysis to determine cost allocation responsibility for required facilities and upgrades. Final estimates will be developed only upon execution of a Facilities Study Agreement in accordance with Part VI of the PJM Tariff. The System Impact Study necessarily will employ various assumptions regarding the New Service Request, other pending requests, and PJM's Regional Transmission Expansion Plan at the time of the study. **IN NO EVENT SHALL THE SYSTEM IMPACT STUDY IN ANY WAY BE DEEMED TO OBLIGATE THE TRANSMISSION PROVIDER OR THE TRANSMISSION OWNERS THAT MAY INTERCONNECT WITH THE NEW SERVICE CUSTOMER TO CONSTRUCT ANY FACILITIES OR UPGRADES.**

CONFIDENTIALITY

7. The New Service Customer agrees to provide all information requested by the Transmission Provider necessary to complete the System Impact Study. Subject to paragraph 8 of this System Impact Study Agreement and to the extent required by Section

222 of the PJM Tariff, information provided pursuant to this Section 7 shall be and remain confidential.

8. Until completion of the System Impact Study, the Transmission Provider shall keep confidential all information provided to it by the New Service Customer. Pursuant to Section 205.4 of the PJM Tariff, upon completion of the System Impact Study, the Transmission Provider shall provide a copy of the System Impact Study to all New Service Customers whose New Service Requests were evaluated in the System Impact Study along with all related work papers. Additionally, Transmission Provider shall post on Transmission Provider's website (i) the existence of the System Impact Study, (ii) the New Service Customers that had New Service Requests evaluated in the System Impact Study, (iii) the location and size in megawatts of each New Service Customer's generation project, if applicable, and (iv) each New Service Customer's Queue Position. Additionally, New Service Customer acknowledges and consents to such other disclosures as may be required under the PJM Tariff or the FERC's rules and regulations.
9. New Service Customer acknowledges that, consistent with Part VI of the PJM Tariff, the Transmission Owners will participate in the System Impact Study process and that the Transmission Provider may disseminate information to the Transmission Owners and rely upon them to conduct part or all of the System Impact Study.

COST RESPONSIBILITY

10. The New Service Customer shall reimburse the Transmission Provider for the actual cost of the System Impact Study in accordance with its cost responsibility as determined under Sections 110.2, 111.2, 112.2, or 203 of the PJM Tariff. The refundable portion of the deposit described in Section 3 of this Agreement, paid by the New Service Customer pursuant to Sections 110.2, 111.2, 112.2, or 204.3A of the PJM Tariff, shall be applied toward the New Service Customer's System Impact Study cost responsibility. Pursuant to Section 204.3 of the PJM Tariff, during the acceptance review of this Agreement, in the event that the Transmission Provider anticipates that the New Service Customer's study cost responsibility will substantially exceed the refundable portion of the deposit, the Transmission Provider shall provide the New Service Customer with an estimate of the additional study costs and the New Service Customer's cost responsibility. 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 New Service Customer with notification of estimated additional study costs, the New Service Customer is responsible for and must pay all actual study costs. If the Transmission Provider provides the New Service Customer with notification of estimated additional study costs, the New Service Customer must pay such estimated additional study costs within ten business days of Transmission Provider sending the New Service Customer notification of such estimated additional study costs. If the New Service Customer fails to pay such estimated additional study costs within ten business days of Transmission Provider sending the New Service Customer notification of such estimated additional

study costs, then the New Service Request shall be deemed to be withdrawn and terminated.

DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

11. In analyzing and preparing the System Impact Study, the Transmission Provider, the Transmission Owner(s), and any other subcontractors employed by the Transmission Provider shall have to rely on information provided by the New Service Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY THE TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SYSTEM IMPACT STUDY. The New Service Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this System Impact Study Agreement nor the System Impact Study prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by the Transmission Provider or the Transmission Owner(s) to provide any transmission or interconnection service to or on behalf of the New Service Customer either at this point in time or in the future.
12. In no event will the Transmission Provider, Transmission Owner(s) or other subcontractors employed by the Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether arising under this System Impact Study Agreement or otherwise, even if the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider have been advised of the possibility of such a loss. Nor shall the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of the Transmission Provider's obligations under this System Impact Study Agreement.

Without limitation of the foregoing, the New Service Customer further agrees that Transmission Owner(s) and other subcontractors employed by the Transmission Provider to prepare or assist in the preparation of any System Impact Study shall be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty/Limitation of Liability."

MISCELLANEOUS

- 13. Any notice or request made to or by either party regarding this System Impact Study Agreement shall be made to the representative of the other party as indicated below.

Transmission Provider

PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403

New Service Customer

- 14. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this System Impact Study Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 15. This System Impact Study Agreement or any part thereof, may not be amended, modified, or waived other than by a writing signed by all parties hereto.
- 16. This System Impact Study Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.
- 17. Neither this System Impact Study Agreement nor the System Impact Study performed hereunder shall be construed as an application for service under Part II or Part III of the PJM Tariff.
- 18. The provisions of Part VI of the PJM Tariff are incorporated herein and made a part hereof.
- 19. Capitalized terms used but not otherwise defined herein shall have the meaning ascribed to them in the PJM Tariff.
- 20. This System Impact Study Agreement shall be come effective on the date it is executed by all parties as of the date of the New Service Customer's execution of it and shall remain in effect until the earlier of (a) the date on which the Transmission Provider tenders the completed System Impact Study and a proposed Facilities Study Agreement to New Service Customer pursuant to Section 206 of the PJM Tariff, or (b) termination and withdrawal of the New Service Request(s) to which the System Impact Study hereunder relates.

21. **No Third-Party Beneficiaries**
This System Impact Study Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the parties, and the obligations herein assumed are solely for the use and benefit of the parties, their successors in interest and where permitted, their assigns.
22. **Multiple Counterparts**
This System Impact Study Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
23. **No Partnership**
This System Impact Study Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the parties or to impose any partnership obligation or partnership liability upon either party. Neither party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other party.
24. **Severability**
If any provision or portion of this System Impact Study Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the parties shall negotiate in good faith to restore insofar as practicable the benefits to each party that were affected by such ruling, and (3) the remainder of this System Impact Study Agreement shall remain in full force and effect.
25. **Governing Law, Regulatory Authority, and Rules**
For Interconnection Requests, the validity, interpretation and enforcement of this System Impact Study Agreement and each of its provisions shall be governed by the laws of the state of _____ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This System Impact Study Agreement is subject to all Applicable Laws and Regulations. Each party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
26. **Reservation of Rights**
The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this System Impact Study Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this System Impact Study Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each

party shall have the right to protest any such filing by the other party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this System Impact Study Agreement shall limit the rights of the parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Transmission Provider and the New Service Customer have caused this System Impact Study Agreement to be executed by their respective authorized officials.

Transmission Provider: PJM Interconnection, L.L.C.

By: _____
Name Title Date

Printed Name

New Service Customer: [Name of Party]

By: _____
Name Title Date

Printed Name

**ATTACHMENT N-2
FORM OF
FACILITIES STUDY AGREEMENT**

(PJM Queue Position #____)

RECITALS

1. This Facilities Study Agreement ("Agreement"), dated as of _____, is entered into by and between _____ ("New Service Customer") and PJM Interconnection, L.L.C. ("Transmission Provider"), pursuant to Part VI of the PJM Interconnection, L.L.C. Open Access Transmission Tariff ("PJM Tariff").
2. Pursuant to Section 36.2 or Section 205 of the PJM Tariff, Transmission Provider has completed a Generation or Transmission Interconnection Feasibility Study or an Initial Study (as applicable) and a System Impact Study and has provided the results of those studies to New Service Customer.
3. Transmission Provider has informed New Service Customer that the estimated date for completion of a Facilities Study pursuant to Section 206 of the PJM Tariff is {date} and that New Service Customer's estimated cost responsibility for such Facilities Study, subject to revision as provided in this Agreement, is \$ _____.
4. New Service Customer desires that Transmission Provider commence a Facilities Study for the New Service Request with Queue Position {queue position}.

PREVIOUS SUBMISSIONS

{For Interconnection Customers, use the following paragraph 5}

5. Except as otherwise specifically set forth in an attachment to this Agreement, New Service Customer represents and warrants that the information provided in section 3 of the Feasibility Study Agreement, dated _____, by and between New Service Customer and Transmission Provider, and to the extent supplemented as set forth in section 4 of the System Impact Study Agreement, dated _____, by and between New Service Customer and Transmission Provider, is accurate and complete as of the date of execution of this Facilities Study Agreement.

{For New Service Customers other than Interconnection Customers use the following paragraph 5}

5. Except as otherwise specifically set forth in an attachment to this Agreement, New Service Customer represents and warrants that the information provided in section 4 of the System Impact Study Agreement, dated _____, by and between New Service Customer and Transmission Provider, is accurate and complete as of the date of execution of this Facilities Study Agreement.

MILESTONES

6. Pursuant to Section 206.1 of the PJM Tariff, the parties agree that New Service Customer must meet the following milestone dates relating to the development of its generation or merchant transmission project(s) or New Service Request, as applicable, in order to retain the assigned Queue Position of its New Service Request(s) (as established pursuant to Section 201 of the PJM Tariff) while Transmission Provider is completing the Facilities Study:

[Specify Project Specific Milestones]

[As appropriate include the following standard Milestones, with any revisions necessary for the project at hand]

- 6.1 Unless New Service Customer previously specified, in its initial drawing submitted to Transmission Provider, the location of the high-side of the generator step-up transformer, then on or before _____, New Service Customer must provide evidence of an ownership interest in, or right to acquire or control the location which shall be on the high voltage side of the Customer Facility generator step-up transformer(s), or in the case of a Customer Facility with a single step-up transformer for multiple generators, the high voltage side of the facility step-up transformer. The evidence of site control shall be a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider.
- 6.2 To the extent New Service Customer intends to elect the Option to Build as provided in Appendix 2 to Attachment P of the Tariff, and to the extent any new or additional property is required to accommodate required Attachment Facilities and/or network substation, on or before _____, New Service Customer must provide evidence of an ownership interest in, or right to acquire or control the location which shall be the location of the network substation which shall be built and subsequently transferred to the Interconnected Transmission Owner. The evidence of site control shall be a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider.

[Add Additional Project Specific Milestones as appropriate]

Should New Service Customer fail to achieve any of the foregoing milestones, its New Service Request(s) shall be deemed to be withdrawn and terminated and it will have to resubmit its New Service Request(s) for reassignment of a Queue Position and re-initiation of the New Service Request study process.

PURPOSE AND SCOPE OF THE FACILITIES STUDY

7. Transmission Provider, in consultation with the affected Transmission Owner(s), shall commence a Facilities Study pursuant to Section 206 of the PJM Tariff to evaluate the Attachment Facilities, Local Upgrades and/or Network Upgrades necessary to accommodate New Service Customer's New Service Request assigned Queue Position **{insert queue position}**. **{Add corresponding info on customer's other projects if necessary.}**
 - A. **Scope of Facilities Study:** The purpose of the Facilities Study is to provide, commensurate with any mutually agreed parameters regarding the scope and degree of specificity described in Schedule A attached to this agreement, conceptual engineering and, as appropriate, detailed design, plus cost estimates and project schedules, to implement the conclusions of the System Impact Study regarding the Attachment Facilities, Local Upgrades and Network Upgrades necessary to accommodate the New Service Customer's New Service Request(s). Cost estimates shall be determined in a manner consistent with Section 217 of the PJM Tariff. The nature and scope of the materials that Transmission Provider shall deliver to the New Service Customer upon completion of the Facilities Study shall be described in the PJM Manuals.
 - B. **Facilities Study Cost and Time Estimate:** Transmission Provider's estimates of the date for completion of the Facilities Study and of New Service Customer's cost responsibility for the Facilities Study are stated in section 3 of this Agreement. In the event that Transmission Provider determines that it will be unable to complete the Facilities Study by the estimated completion date stated in section 3 of this Agreement, it shall notify New Service Customer and will explain the reasons for the delay. New Service Customer agrees that its estimated cost responsibility stated in section 3 is subject to revision as provided in sections 14, 15 and 16 of this Agreement.
8. The Facilities Study necessarily will employ various assumptions regarding New Service Customer's New Service Request(s), other pending New Service Requests, and PJM's Regional Transmission Expansion Plan at the time of the study. **IN NO EVENT SHALL THIS AGREEMENT OR THE FACILITIES STUDY IN ANY WAY BE DEEMED TO OBLIGATE TRANSMISSION PROVIDER OR THE TRANSMISSION OWNERS TO CONSTRUCT ANY FACILITIES OR UPGRADES OR TO PROVIDE ANY TRANSMISSION OR INTERCONNECTION SERVICE TO OR ON BEHALF OF NEW SERVICE CUSTOMER EITHER AT THIS POINT IN TIME OR IN THE FUTURE.**

CONFIDENTIALITY

9. New Service Customer agrees to provide all information requested by Transmission Provider necessary to complete the Facilities Study. Subject to section 10 of this

Agreement and to the extent required by Section 222 of the PJM Tariff, information provided pursuant to this section 9 shall be and remain confidential.

10. Until completion of the Facilities Study, Transmission Provider shall keep confidential all information provided to it by the New Service Customer. Upon completion of the Facilities Study, Transmission Provider shall provide a copy of the study to New Service Customer, and to all other New Service Customers whose New Service Requests were evaluated in the Facilities Study, along with (to the extent consistent with Transmission Provider's confidentiality obligations in Section 18.17 of the Operating Agreement) all related work papers. Transmission Provider also shall post on its website the existence of the Facilities Study. New Service Customer acknowledges and consents to such other, additional disclosures of information as may be required under the PJM Tariff or the FERC's rules and regulations.
11. New Service Customer acknowledges that, consistent with Part VI of the PJM Tariff, the affected Transmission Owner(s) will participate in the Facilities Study process and that Transmission Provider may disseminate information to the affected Transmission Owner(s) and may consult with them regarding part or all of the Facilities Study.

COST RESPONSIBILITY

12.
 - A. New Service Customer shall reimburse Transmission Provider for all, or for an allocated portion of, the actual cost of the Facilities Study in accordance with its cost responsibility as determined under Section 206 of the PJM Tariff.
 - B. Prior to initiating the Facilities Study, Transmission Provider shall bill New Service Customer for New Service Customer's share of the cost of work on the study that is scheduled to be completed during the first three months after work commences. Thereafter, on or before the 5th business day of every third month, Transmission Provider shall bill New Service Customer for New Service Customer's share of the cost of work expected to be completed on the Facilities Study during the ensuing three months. New Service Customer shall pay each bill within twenty (20) days after receipt thereof. In the event New Service Customer fails, other than as provided below regarding billing disputes, to make timely payment of any invoice for work on the Facilities Study, its New Service Request shall be deemed to be terminated and withdrawn as of the date when payment was due. Notwithstanding the foregoing, in the event that the total estimated cost of the Facilities Study does not exceed the amount of the deposit required under Section 206 of the PJM Tariff, Transmission Provider shall apply the deposit in payment of the invoices for the cost of the Facilities Study. Upon written request by the New Service Customer pursuant to Section 206.4.1.1 of the PJM Tariff, Transmission Provider may provide a quarterly cost reconciliation. Subject to the following sentence regarding the final cost reconciliation upon completion of the Facility Study, such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work. Within 120 days after Transmission Provider completes the Facilities Study, Transmission Provider shall provide a final invoice presenting an accounting of, and the

appropriate party shall make any payment to the other that is necessary to resolve, any difference between (a) New Service Customer's cost responsibility under this Agreement and the PJM Tariff for the actual cost of the Facilities Study and (b) New Service Customer's aggregate payments hereunder, including its deposits.

C. In the event of a billing dispute, Transmission Provider shall continue to perform its obligations under this Agreement so long as (1) New Service Customer continues to make all payments not in dispute, and (2) New Service Customer's aggregate deposits held by Transmission Provider under this Agreement while the dispute is pending exceeds the amount in dispute, or (3) New Service Customer pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If New Service Customer fails to meet any of these requirements, then its New Service Request shall be deemed to be terminated and withdrawn as of the date when payment was due.

13. Concurrent with execution of this Agreement, New Service Customer will pay Transmission Provider a cash deposit, as provided by Section 206 of the PJM Tariff, equal to the greater of \$100,000-~~00~~ or New Service Customer's estimated cost responsibility for the first three months of work on the Facilities Study. Notwithstanding the foregoing, an Interconnection Customer with a proposed Customer Facility that is: (a) equal to or less than 20 MW but greater than 2 MW shall pay a refundable deposit in the amount of \$50,000; or (b) equal to or less than 2 MW shall pay a refundable deposit in the amount of \$15,000. New Service Customer's quarterly estimated cost responsibility shall equal its estimated cost responsibility for the work on the Facilities Study that is scheduled to be completed during each three-month period after such work commences. If New Service Customer fails timely to provide the deposit required by this section, its New Service Request shall be deemed terminated and withdrawn and this Agreement shall be null and void. New Service Customer acknowledges that it may become obligated to pay one or more additional deposits pursuant to sections 14 and 15 below. Except as otherwise provided in section 12.B above, Transmission Provider shall continue to hold the amounts on deposit under this agreement until settlement of the final invoice.
14. If the Facilities Study, as described in section 7.A of this Agreement, is to include evaluation of more than one New Service Request and one or more of those requests is terminated and withdrawn, subject to the terms of section 15 of this Agreement, Transmission Provider will redetermine and reallocate the costs of the Facilities Study among the remaining participating New Service Customers in accord with Section 206 of the PJM Tariff. In that event, and subject to the terms of section 15, within 30 days after the date for execution and return of Facilities Study Agreements as determined under Section 206 of the PJM Tariff, Transmission Provider will provide the New Service Customer with a written statement of the New Service Customer's revised responsibility for the estimated cost of the Facilities Study, determined in accordance with Section 206 of the PJM Tariff. In the event that New Service Customer's revised cost responsibility exceeds the sum of its previous deposits for the Facilities Study, it shall deliver to Transmission Provider, within 10 days after New Service Customer's receipt of its

revised cost responsibility, an additional cash deposit equal to the amount of the excess. If New Service Customer fails timely to provide an additional deposit that is required under this section, its New Service Request shall be deemed terminated and withdrawn as of the date by which its additional deposit was due. In the event that New Service Customer's revised cost responsibility under the notice described in this section is less than the sum of its previous deposits for the Facilities Study, Transmission Provider shall return to New Service Customer, with its notice of the revised cost responsibility, the amount of the difference.

15. A. This section shall apply prior to commencement of the Facilities Study (1) if the Facilities Study is to include multiple New Service Requests; and (2) if, in Transmission Provider's reasonable judgment, the termination and withdrawal of one or more of those New Service Requests significantly changes the group of New Service Requests to be included in the Facilities Study from the group that was included in the System Impact Study. For the purposes of this section, a change to the group of New Service Requests to be included in the Facilities Study shall be significant if, in Transmission Provider's reasonable engineering judgment, the change is likely to cause the system constraints relating to, and/or the facilities and upgrades necessary to accommodate, the group of New Service Requests remaining to be included in the Facilities Study to differ materially from the system constraints relating to, and/or from the facilities and upgrades necessary to accommodate, the group of New Service Requests that the System Impact Study evaluated.
- B. In the event of a significant change to the group of New Service Requests that the System Impact Study evaluated, within 15 days after the date for execution and return of Facilities Study Agreements as determined under Section 206 of the PJM Tariff, Transmission Provider shall provide New Service Customer with an explanation of the nature and extent of the change in the affected group of New Service Requests and of the extent to which Transmission Provider has determined that it must re-assess the results of the System Impact Study. Within 30 days after it provides the explanation described in the preceding sentence, Transmission Provider shall provide New Service Customer with a revised estimate of the time needed, and of the likely cost, to complete the Facilities Study, and, if the study continues to include evaluation of more than one New Service Customer's New Service Request(s), New Service Customer's allocated share of the estimated cost of the revised Facilities Study, determined in accord with Section 206 of the PJM Tariff.
- C. In the event that New Service Customer's revised cost responsibility exceeds the sum of its previous deposits for the Facilities Study, it shall deliver to Transmission Provider, within 10 days after New Service Customer's receipt of its revised cost responsibility, an additional cash deposit equal to the amount of the excess. If New Service Customer fails timely to provide an additional deposit that is required under this section, its New Service Request shall be deemed terminated and withdrawn as of the date by which its additional deposit was due. In the event that New Service Customer's revised cost responsibility under the notice described in this section is less than the sum of its previous deposits for the Facilities Study, Transmission Provider shall return to

New Service Customer, with its notice of the revised cost responsibility, the amount of the difference.

16. A. If the Facilities Study includes New Service Customer's New Service Request(s) only, New Service Customer may terminate its participation in the study at any time by providing written notice of termination to Transmission Provider. New Service Customer's notice of termination (1) shall be effective as of the end of the business day following the day that Transmission Provider receives such notice and (2) concurrently shall have the effect of terminating and withdrawing New Service Customer's New Service Request(s). New Service Customer will be responsible for all costs of the Facilities Study that Transmission Provider incurred prior to the effective date of the notice of termination. Within thirty (30) days after the effective date of New Service Customer's notice of termination, Transmission Provider will deliver to New Service Customer a statement of New Service Customer's responsibility for the costs of the Facilities Study incurred up to the date of termination. In the event that New Service Customer's cost responsibility as of the date of termination exceeds the sum of its deposits then held by Transmission Provider for the Facilities Study, Transmission Provider's statement will include an invoice in the amount of such excess. New Service Customer will pay that invoice within ten (10) days after it receives it. In the event that New Service Customer does not pay the invoice within ten (10) days after receipt, New Service Customer shall owe the invoice amount plus interest at the applicable rate prescribed in 18 C.F.R. § 35.19a (a)(2)(iii), accrued from the day after the date payment was due until the date of payment. In the event that New Service Customer's cost responsibility as of the date of termination was less than the sum of its deposits for the Facilities Study, Transmission Provider's statement will include a payment to New Service Customer in the amount of the difference.
- B. If the Facilities Study includes any New Service Request(s) other than that (those) of New Service Customer, termination and withdrawal of New Service Customer's New Service Request(s) at any time after Transmission Provider has commenced the Facilities Study will not alter New Service Customer's responsibility for the costs of the Facilities Study under this Agreement and the PJM Tariff.

DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

17. In analyzing and preparing the Facilities Study, Transmission Provider, the Transmission Owners, and any other subcontractors employed by Transmission Provider shall have to rely on information provided by New Service Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNERS, NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY,

CONTENT, OR CONCLUSIONS OF THE FACILITIES STUDY. New Service Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

18. In no event will Transmission Provider, the Transmission Owners or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Facilities Study Agreement or the Facilities Study, even if Transmission Provider, the Transmission Owners, or other subcontractors employed by Transmission Provider have been advised of the possibility of such a loss. Nor shall Transmission Provider, the Transmission Owners, or other subcontractors employed by Transmission Provider be liable for any delay in delivery, or for the non-performance or delay in performance, of Transmission Provider's obligations under this Agreement.

Without limitation of the foregoing, New Service Customer further agrees that the Transmission Owners and other subcontractors employed by Transmission Provider to prepare or assist in the preparation of any Facilities Study shall be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty/Limitation of Liability."

MISCELLANEOUS

19. Any notice or request made to or by either party regarding this Facilities Study Agreement shall be made to the representative of the other party as indicated below.

Transmission Provider

PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403

New Service Customer

20. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
21. This Agreement or any part thereof, may not be amended, modified, assigned or waived other than by a writing signed by all parties hereto.
22. This Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.

23. Neither this Agreement nor the Facilities Study performed hereunder shall be construed as an application for service under Part II or Part III of the PJM Tariff.
24. The provisions of Part VI of the PJM Tariff are incorporated herein and made a part hereof.
25. Capitalized terms used but not otherwise defined herein shall have the meaning ascribed to them in the PJM Tariff.
26. This Facilities Study Agreement shall become effective on the date it is executed by all parties as of the date of the New Service Customer's execution of it and shall remain in effect until the earlier of (a) the date on which the Transmission Provider tenders the completed Facilities Study and, as applicable, a proposed Interconnection Service Agreement or Upgrade Construction Service Agreement to New Service Customer pursuant to Section 212 or Section 213, respectively, of the PJM Tariff, or (b) termination and withdrawal of the New Service Request(s) to which the Facilities Study hereunder relates.
27. **No Third-Party Beneficiaries**
This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the parties, and the obligations herein assumed are solely for the use and benefit of the parties, their successors in interest and where permitted, their assigns.
28. **Multiple Counterparts**
This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
29. **No Partnership**
This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the parties or to impose any partnership obligation or partnership liability upon either party. Neither party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other party.
30. **Severability**
If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the parties shall negotiate in good faith to restore insofar as practicable the benefits to each party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.
31. **Governing Law, Regulatory Authority, and Rules**

For Interconnection Requests, the validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of _____ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

32. Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each party shall have the right to protest any such filing by the other party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the parties otherwise agree as provided herein.

IN WITNESS WHEREOF, Transmission Provider and the New Service Customer have caused this Facilities Study Agreement to be executed by their respective authorized officials.

Transmission Provider: PJM Interconnection, L.L.C.

By: _____
Name Title Date

Printed Name

New Service Customer: [Name of Party]

By: _____
Name Title Date

Printed Name

Schedule A
Details of Design and Cost Estimates/Quality
For the Facilities Study

[insert details regarding degree of accuracy of cost estimates and associated scope of design as mutually agreed by Transmission Provider and New Service Customer]

ATTACHMENT N-3

FORM OF

OPTIONAL INTERCONNECTION STUDY AGREEMENT

(PJM Queue Position #___)

THIS AGREEMENT is made and entered into this ___ day of _____, 20__ by and between _____, a _____ organized and existing under the laws of the State of _____, (“Interconnection Customer”) and _____, a _____ existing under the laws of the State of _____, (“Transmission Provider”). Interconnection Customer and Transmission Provider each may be referred to as a “Party,” or collectively as the “Parties”.

RECITALS

WHEREAS, Interconnection Customer is proposing to develop or expand a generating facility or Merchant Transmission Facilities consistent with the Interconnection Request submitted by the Interconnection Customer dated _____ and designated as project [Queue Position].

WHEREAS, Interconnection Customer is proposing to establish an interconnection with the Transmission System; and

WHEREAS, Interconnection Customer has submitted to Transmission Provider an Interconnection Request; and

WHEREAS, on or after the date when the Interconnection Customer receives the System Impact Study results, Interconnection Customer has further requested that the Transmission Provider prepare an Optional Interconnection Study;

NOW THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

1. when used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the PJM Interconnection L.L.C. Open Access Transmission Tariff (“Tariff”).
2. Interconnection Customer elects and Transmission Provider shall cause an Optional Interconnection Study consistent with Section 209 of the Tariff to be performed in accordance with the Tariff.
3. The scope of the Optional Interconnection Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
4. The Optional Interconnection Study shall be performed solely for informational purposes.

5. The Optional Interconnection Study report shall provide a sensitivity analysis based on the assumptions specified by the Interconnection Customer in Attachment A to this Agreement. The Optional Interconnection Study will identify the Attachment Facilities, Local Upgrade and Network Upgrades, and the estimated cost thereof, that may be required to provide Interconnection Service based upon the assumptions specified by the Interconnection Customer in Attachment A.
6. The Interconnection Customer shall provide an initial deposit of \$10,000 for the performance of the Optional Interconnection Study. The Transmission Provider's good faith estimate for the time of completion of the Optional Interconnection Study is [insert date]. Within 45 days after Transmission Provider completes the Optional Interconnection Study, Transmission Provider shall provide an accounting of, and the appropriate party shall make any payment to the other that is necessary to resolve, any difference between (a) Interconnection Customer's cost responsibility under this Agreement and the PJM Tariff for the actual cost of the Optional Interconnection Study and (b) Interconnection Customer's aggregate payments hereunder, including its deposits.

Upon delivery of the Optional Interconnection Study, the Transmission Provider shall charge and the Interconnection Customer shall pay the actual costs of the Optional Study.

DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

7. In analyzing and preparing the Optional Study, Transmission Provider, the Transmission Owners, and any other subcontractors employed by Transmission Provider shall have to rely on information provided by Interconnection Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, **NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNERS, NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE OPTIONAL INTERCONNECTION STUDY.** Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.
8. In no event will Transmission Provider, the Transmission Owners or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Optional Interconnection Study Agreement or the Optional Interconnection Study, even if Transmission Provider, the Transmission Owners, or other subcontractors employed by Transmission Provider have been advised of the possibility of such a loss. Nor shall Transmission Provider, the Transmission Owners, or other

subcontractors employed by Transmission Provider be liable for any delay in delivery, or for the non-performance or delay in performance, of Transmission Provider's obligations under this Agreement.

Without limitation of the foregoing, Interconnection Customer further agrees that the Transmission Owners and other subcontractors employed by Transmission Provider to prepare or assist in the preparation of any Optional Interconnection Study shall be deemed third party beneficiaries of this section 8.

MISCELLANEOUS

- 9. Any notice or request made to or by either party regarding this Optional Interconnection Study Agreement shall be made to the representative of the other party as indicated below.

Transmission Provider

PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403

Interconnection Customer

- 10. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 11. This Agreement or any part thereof, may not be amended, modified, assigned or waived other than by a writing signed by all parties hereto.
- 12. This Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.
- 13. Neither this Agreement nor the Optional Interconnection Study performed hereunder shall be construed as an application for service under Part II or Part III of the PJM Tariff.
- 14. The provisions of Part VI of the PJM Tariff are incorporated herein and made a part hereof.
- 15. This Optional Interconnection Study Agreement shall become effective on the date it is executed by all parties ~~as of the date the New Service Customer's execution of it~~ and shall remain in effect until the earlier of (a) completion and final payment for the

Optional Interconnection Study or (b) termination and withdrawal of the Interconnection Request(s) to which the Optional Interconnection Study hereunder relates.

16. **Governing Law, Regulatory Authority, and Rules**

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of _____ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

17. **No Third-Party Beneficiaries**

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

18. **Multiple Counterparts**

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

19. **No Partnership**

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

20. **Severability**

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

21. **Reservation of Rights**

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in

which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, Transmission Provider and the Interconnection Customer have caused this Optional Interconnection Study Agreement to be executed by their respective authorized officials.

Transmission Provider: PJM Interconnection, L.L.C.

By: _____
Name Title Date

Printed Name

Interconnection Customer: [Name of Party]

By: _____
Name Title Date

Printed Name

**FORM OF
INTERCONNECTION SERVICE AGREEMENT**

**By and Among
PJM Interconnection, L.L.C.**

**And
[Name of Interconnection Customer]**

**And
[Name of Interconnected Transmission Owner]
(PJM Queue Position #__)**

- 1.0 Parties. This Interconnection Service Agreement (“ISA”) including the Specifications, Schedules and Appendices attached hereto and incorporated herein, is entered into by and between PJM Interconnection, L.L.C., the Regional Transmission Organization for the PJM Region (hereinafter “Transmission Provider” or “PJM”), _____ (“Interconnection Customer” [OPTIONAL: or “[short name]”]) and _____ (“Interconnected Transmission Owner” [OPTIONAL: or “[short name]”]). All capitalized terms herein shall have the meanings set forth in the appended definitions of such terms as stated in Part I of the PJM Open Access Transmission Tariff (“Tariff”). [Use as/when applicable: This ISA supersedes the _____ {insert details to identify the agreement being superseded, such as whether it is an Interim Interconnection Service Agreement, Interconnection Service Agreement, or Interconnection Agreement, the effective date of the agreement, the service agreement number designation, and the FERC docket number, if applicable, for the agreement being superseded.}]]
- 2.0 Authority. This ISA is entered into pursuant to Part VI of the Tariff. Interconnection Customer has requested an Interconnection Service Agreement under the Tariff, and Transmission Provider has determined that Interconnection Customer is eligible under the Tariff to obtain this ISA. The standard terms and conditions for interconnection as set forth in Appendix 2 to this ISA are hereby specifically incorporated as provisions of this ISA. Transmission Provider, Interconnected Transmission Owner and Interconnection Customer agree to and assume all of the rights and obligations of the Transmission Provider, Interconnected Transmission Owner and Interconnection Customer, respectively, as set forth in Appendix 2 to this ISA.
- 3.0 Customer Facility Specifications. Attached are Specifications for the Customer Facility that Interconnection Customer proposes to interconnect with the Transmission System. Interconnection Customer represents and warrants that, upon completion of construction of such facilities, it will own or control the Customer Facility identified in section 1.0 of the Specifications attached hereto and made a part hereof. In the event that Interconnection Customer will not own the Customer Facility, Interconnection Customer represents and warrants that it is authorized by the owner(s) thereof to enter into this ISA and to represent such control.
- 4.0 Effective Date. Subject to any necessary regulatory acceptance, this ISA shall become effective on the date it is executed by all Interconnection Parties, or, if the agreement is

filed with FERC unexecuted, upon the date specified by FERC. This ISA shall terminate on such date as mutually agreed upon by the parties, unless earlier terminated in accordance with the terms set forth in Appendix 2 to this ISA. The term of the ISA shall be as provided in Section 1.3 of Appendix 2 to this ISA. Interconnection Service shall commence as provided in Section 1.2 of Appendix 2 to this ISA.

- 5.0 Security. In accord with Section 212.4 of the Tariff, Interconnection Customer shall provide the Transmission Provider (for the benefit of the Interconnected Transmission Owner) with a letter of credit from an agreed provider or other form of security reasonably acceptable to the Transmission Provider and that names the Transmission Provider as beneficiary (“Security”) in the amount of \$_____. This amount represents the sum of the estimated Costs, determined in accordance with Sections 212 and 217 of the Tariff, for which the Interconnection Customer will be responsible, less any Costs already paid by Interconnection Customer. Interconnection Customer acknowledges that its ultimate cost responsibility in accordance with Section 217 of the Tariff will be based upon the actual Costs of the facilities described in the Specifications, whether greater or lesser than the amount of the payment security provided under this section.

[Include the following if Interconnection Customer requests deferral of the security as provided for in Section 212.4(c) of the Tariff:

For any portion of the security that may be deferred in accordance with Section 212.4(c) of the Tariff, and as requested by Interconnection Customer, Interconnection Customer shall provide the security specified in this Section 5.0 within 120 days after the Interconnection Customer executes this ISA, provided that Interconnection Customer shall pay a deposit of at least \$200,000 or 125% of the estimated costs that will be incurred during the 120-day period, whichever is greater, to fund continued design work and/or procurement activities, with \$100,000 of such deposit being non-refundable.]

Should Interconnection Customer fail to provide security at the time the Interconnection Customer executes this ISA, or, if deferred, by the end of the 120-day period, this ISA shall be terminated.

- 6.0 Project Specific Milestones. In addition to the milestones stated in Section 212.5 of the Tariff, as applicable, during the term of this ISA, Interconnection Customer shall ensure that it meets each of the following development milestones:

[Specify Project Specific Milestones]

[As appropriate include the following standard Milestones, with any revisions necessary for the project at hand:

- 6.1 Substantial Site work completed. On or before _____ Interconnection Customer must demonstrate completion of at least 20% of project site construction. At this time, Interconnection Customer must submit to Interconnected Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Customer Interconnection Facilities.
- 6.2 Delivery of major electrical equipment. On or before _____, Interconnection Customer must demonstrate that ___ generating units have been delivered to Interconnection Customer’s project site.
- 6.3 Commercial Operation. (i) On or before _____, Interconnection Customer must demonstrate commercial operation of ___ generating units; (ii) On or before _____, Interconnection Customer must demonstrate commercial operation of ___ additional generating units. Demonstrating commercial operation includes achieving Initial Operation in accordance with Section 1.4 of Appendix 2 to this ISA and making commercial sales or use of energy, as well as, if applicable, obtaining capacity qualification in accordance with the requirements of the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

[if a specific situation requires a CSA by a certain date then use the following: Interconnection Construction Service Agreement. On or before _____, Interconnection Customer must have either (a) executed an Interconnection Construction Service Agreement for Interconnection Facilities for which Interconnection Customer has cost responsibility; (b) requested dispute resolution under Section 12 of the PJM Tariff, or if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement; or (c) requested that the Transmission Provider file the Interconnection Construction Service Agreement unexecuted with the Commission.]

- 6.4 Within one (1) month following commercial operation of generating unit(s), Interconnection Customer must provide certified documentation demonstrating that “as-built” Customer Facility and Customer Interconnection Facilities are in accordance with applicable PJM studies and agreements. Interconnection Customer must also provide PJM with “as-built” electrical modeling data or confirm that previously submitted data remains valid.

[Add Additional Project Specific Milestones as appropriate]

Interconnection Customer shall demonstrate the occurrence of each of the foregoing milestones to Transmission Provider’s reasonable satisfaction. Transmission Provider may reasonably extend any such milestone dates, in the event of delays that Interconnection Customer (i) did not cause and (ii) could not have remedied through the exercise of due diligence. The milestone dates stated in this ISA shall be deemed to be extended coextensively with any suspension of work initiated by Interconnection Customer in accordance with the Interconnection Construction Service Agreement.

- 7.0 Provision of Interconnection Service. Transmission Provider and Interconnected Transmission Owner agree to provide for the interconnection to the Transmission System in the PJM Region of Interconnection Customer's Customer Facility identified in the Specifications in accordance with Part IV and Part VI of the Tariff, the Operating Agreement of PJM Interconnection, L.L.C. ("Operating Agreement"), and this ISA, as they may be amended from time to time.
- 8.0 Assumption of Tariff Obligations. Interconnection Customer agrees to abide by all rules and procedures pertaining to generation and transmission in the PJM Region, including but not limited to the rules and procedures concerning the dispatch of generation or scheduling transmission set forth in the Tariff, the Operating Agreement and the PJM Manuals.
- 9.0 Facilities Study. In analyzing and preparing the [Facilities Study] [System Impact Study {if a Facilities Study was not required}], and in designing and constructing the Attachment Facilities, Local Upgrades and/or Network Upgrades described in the Specifications attached to this ISA, Transmission Provider, the Interconnected Transmission Owner(s), and any other subcontractors employed by Transmission Provider have had to, and shall have to, rely on information provided by Interconnection Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, THE INTERCONNECTED TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER OR INTERCONNECTED TRANSMISSION OWNER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE FACILITIES STUDY OR THE SYSTEM IMPACT STUDY IF A FACILITIES STUDY WAS NOT REQUIRED OR OF THE ATTACHMENT FACILITIES, THE LOCAL UPGRADES AND/OR THE NETWORK UPGRADES, PROVIDED, HOWEVER, that Transmission Provider warrants that the Transmission Owner Interconnection Facilities and any Merchant Transmission Upgrades described in the Specifications will be designed and constructed (to the extent that Interconnected Transmission Owner is responsible for design and construction thereof) and operated in accordance with Good Utility Practice, as such term is defined in the Operating Agreement. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.
- 10.0 Construction of Transmission Owner Interconnection Facilities
- 10.1. Cost Responsibility. Interconnection Customer shall be responsible for and shall pay upon demand all Costs associated with the interconnection of the Customer Facility as specified in the Tariff. These Costs may include, but are not limited to,

an Attachment Facilities charge, a Local Upgrades charge, a Network Upgrades charge and other charges. A description of the facilities required and an estimate of the Costs of these facilities are included in Sections 3.0 and 4.0 of the Specifications to this ISA.

- 10.2. Billing and Payments. Transmission Provider shall bill the Interconnection Customer for the Costs associated with the facilities contemplated by this ISA, estimates of which are set forth in the Specifications to this ISA, and the Interconnection Customer shall pay such Costs, in accordance with Section 11 of Appendix 2 to this ISA and the applicable Interconnection Construction Service Agreement. Upon receipt of each of Interconnection Customer's payments of such bills, Transmission Provider shall reimburse the applicable Interconnected Transmission Owner. Pursuant to Section 212.4 of the Tariff, Interconnection Customer requests that Transmission Provider provide a quarterly cost reconciliation:

_____ Yes

_____ No

- 10.3. Contract Option. In the event that the Interconnection Customer and Interconnected Transmission Owner agree to utilize the Negotiated Contract Option provided by the Interconnection Construction Service Agreement to establish, subject to FERC acceptance, non-standard terms regarding cost responsibility, payment, billing and/or financing, the terms of Sections 10.1 and/or 10.2 of this Section 10.0 shall be superseded to the extent required to conform to such negotiated terms, as stated in a schedule attached to the parties' Interconnection Construction Service Agreement relating to interconnection of the Customer Facility.

- 10.4 In the event that the Interconnection Customer elects to construct some or all of the Transmission Owner Interconnection Facilities under the Option to Build of the Interconnection Construction Service Agreement, billing and payment for the Costs associated with the facilities contemplated by this ISA shall relate only to such portion of the Interconnection Facilities as the Interconnected Transmission Owner is responsible for building.

11.0 Interconnection Specifications

- 11.1 Point of Interconnection. The Point of Interconnection shall be as identified on the one-line diagram attached as Schedule B to this ISA.
- 11.2 List and Ownership of Interconnection Facilities. The Interconnection Facilities to be constructed and ownership of the components thereof are identified in Section 3.0 of the Specifications attached to this ISA.

11.3 Ownership and Location of Metering Equipment. The Metering Equipment to be constructed, the capability of the Metering Equipment to be constructed, and the ownership thereof, are identified on the attached Schedule C to this ISA.

11.4 Applicable Technical Standards. The Applicable Technical Requirements and Standards that apply to the Customer Facility and the Interconnection Facilities are identified in Schedule D to this ISA.

12.0 Power Factor Requirement.

Consistent with Section 4.7 of Appendix 2 to this ISA, the power factor requirement is as follows:

[For Generation Interconnection Customers]

{The following language should be included for new large and small synchronous generation facilities that will have the Tariff specified power factor. This section does not apply if the Interconnection Request is for an incremental increase in generating capability.}

The Interconnection Customer shall design its Customer Facility with the ability to maintain a power factor of at least 0.95 leading to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

{For all wind or non-synchronous generation facilities which have entered the New Services Queue prior to May 1, 2015, include the appropriate alternative from the language below. This section does not apply if the Interconnection Request is for an incremental increase in generating capability.}

The result of the System Impact Study indicated that, for the safety and reliability of the Transmission System, no power factor requirement is required for the [wind-powered] [non-synchronous] Customer Facility.

{or}

The results of the System Impact Study require that, for the safety or reliability of the Transmission System, the Generation Interconnection Customer shall design its [wind-powered] [non-synchronous] Customer Facility with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the Point of Interconnection.

{include the following language if the Interconnection Request is for an incremental increase in capacity or energy output to a synchronized generation facility}

The existing __ MW portion of the Customer Facility shall retain its existing ability to maintain a power factor of at least 0.95 leading to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

The increase of ___ MW to the Customer Facility associated with this ISA shall be designed with the ability to maintain a power factor of at least 1.0 (unity) to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

{For new wind or non-synchronous generation facilities which have entered the New Service Queue on or after May 1, 2015, and before November 1, 2016, the following applies:}

The Generation Interconnection Customer shall design its [wind-powered] [non-synchronous] Customer Facility with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the generator's terminals.

{For new wind or non-synchronous generation facilities which have entered the New Service Queue after November 1, 2016, the following applies:}

The Generation Interconnection Customer shall design its [wind-powered] [non-synchronous] Customer Facility with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

{For all wind or non-synchronous generation facilities that have entered the New Services Queue prior to May 1, 2015, include the appropriate alternative from the language below for Interconnection Requests for an incremental increase in capacity or energy output to all wind or non-synchronized generation facility.}

The results of the System Impact Study indicate that, for the safety or reliability of the Transmission System, no power factor requirement is necessary for the [existing ___ MW or the increase of ___ MW associated with this ISA] [increase of ___ MW associated with this ISA, but that the existing ___ MW of the Customer Facility must retain its ability to retain a power factor of at least 0.95 leading to 0.95 lagging measured at the Point of Interconnection] [existing ___ MW of the Customer Facility but that the increase of ___ MW associated with this ISA must be designed with the ability to maintain a power factor requirement of 1.0 (unity) to 0.90 lagging measured at the Point of Interconnection].

{or}

The results of the System Impact Study indicate that, for the safety or reliability of the Transmission System, (i) the existing ___ MW portion of the Customer Facility shall retain its existing ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the Point of Interconnection and (ii) the increase of ___ MW to the Customer Facility associated with this ISA shall be designed with the ability to maintain a power factor of at least 1.0 (unity) to 0.95 lagging measured at the Point of Interconnection.

{For all wind or non-synchronous generation facilities requesting an incremental increase in capacity or energy output which have entered the New Services Queue on or after May 1, 2015, and before November 1, 2016, include the following requirements: }

{NOTE: This section does not apply to requests for an incremental increase in capacity or energy output for wind or non-synchronous generation facilities which were commercially operable or had entered the New Services Queue prior to May 1, 2015.}

The existing [wind-powered] [non-synchronous] __ MW portion of the Customer Facility shall retain the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the generator's terminals.

The increase of __ MW to the [wind-powered] [non-synchronous] Customer Facility associated with this ISA shall be designed with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the generator's terminals.

{For all wind or non-synchronous generation facilities requesting an incremental increase in capacity or energy output which have entered the New Services Queue after November 1, 2016, and were not commercially operable prior to November 1, 2016 include the following requirements: }

The existing [wind-powered] [non-synchronous] __ MW portion of the Customer Facility shall retain the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

The increase of __ MW to the [wind-powered] [non-synchronous] Customer Facility associated with this ISA shall be designed with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

{For all wind or non-synchronous generation facilities requesting an incremental increase in capacity or energy output which have entered the New Services Queue on or after November 1, 2016, and were commercially operable prior to November 1, 2016, include the following requirements: }

The result of the System Impact Study indicated that, for the safety and reliability of the Transmission System, no power factor requirement is required for the [wind-powered] [non-synchronous] Customer Facility.

{or}

The results of the System Impact Study require that, for the safety or reliability of the Transmission System, the Generation Interconnection Customer shall design its [wind-powered] [non-synchronous] Customer Facility with the ability to maintain a power

factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

[For Transmission Interconnection Customers]

{The following language should be included only for new Merchant Transmission Facilities }

Transmission Interconnection Customer shall design its Merchant D.C. Transmission Facilities and/ or Controllable A.C. Merchant Transmission Facilities, to maintain a power factor at the Point of Interconnection of at least 0.95 leading and 0.95 lagging, when such Customer Facility is operating at any level within its approved operating range.

[Include section 12A.0 only when applicable, i.e., only for a facility for which Transmission Provider and Interconnected Transmission Owner deem an RTU (or equivalent) to be unnecessary]

- 12A.0 RTU. In accordance with Section 8.5.2 of Appendix 2 to this ISA, that provision's requirement for installation of a remote terminal unit or equivalent data collection and transfer equipment is hereby waived for purposes of this ISA.
- 13.0 Charges. In accordance with Sections 10 and 11 of Appendix 2 to this ISA, the Interconnection Customer shall pay to the Transmission Provider the charges applicable after Initial Operation, as set forth in Schedule E to this ISA. Promptly after receipt of such payments, the Transmission Provider shall forward such payments to the appropriate Interconnected Transmission Owner.
- 14.0 Third Party Beneficiaries. No third party beneficiary rights are created under this ISA, except, however, that, subject to modification of the payment terms stated in Section 10 of this ISA pursuant to the Negotiated Contract Option, payment obligations imposed on Interconnection Customer under this ISA are agreed and acknowledged to be for the benefit of the Interconnected Transmission Owner(s). Interconnection Customer expressly agrees that the Interconnected Transmission Owner(s) shall be entitled to take such legal recourse as it deems appropriate against Interconnection Customer for the payment of any Costs or charges authorized under this ISA or the Tariff with respect to Interconnection Service for which Interconnection Customer fails, in whole or in part, to pay as provided in this ISA, the Tariff and/or the Operating Agreement.
- 15.0 Waiver. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this ISA shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 16.0 Amendment. This ISA or any part thereof, may not be amended, modified, or waived other than by a written document signed by all parties hereto.

- 17.0 Construction With Other Parts Of The Tariff. This ISA shall not be construed as an application for service under Part II or Part III of the Tariff.
- 18.0 Notices. Any notice or request made by either party regarding this ISA shall be made, in accordance with the terms of Appendix 2 to this ISA, to the representatives of the other party and as applicable, to the Interconnected Transmission Owner(s), as indicated below:

Transmission Provider:

PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403

Interconnection Customer:

Interconnected Transmission Owner:

- 19.0 Incorporation Of Other Documents. All portions of the Tariff and the Operating Agreement pertinent to the subject matter of this ISA and not otherwise made a part hereof are hereby incorporated herein and made a part hereof.
- 20.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service. Subject to FERC approval, the parties agree that the terms and conditions set forth in Schedule F hereto are hereby incorporated herein by reference and be made a part of this ISA. In the event of any conflict between a provision of Schedule F that FERC has accepted and any provision of Appendix 2 to this ISA that relates to the same subject matter, the pertinent provision of Schedule F shall control.
- 21.0 Addendum of Interconnection Customer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status. To the extent required, in accordance with Section 24.1 of Appendix 2 to this ISA, Schedule G to this ISA shall set forth the Interconnection Customer's agreement to conform with the IRS safe harbor provisions for non-taxable status.
- 22.0 Addendum of Interconnection Requirements for all Wind or Non-synchronous Generation Facilities. To the extent required, Schedule H to this ISA sets forth interconnection requirements for a wind or non-synchronous generation facilities and is hereby incorporated by reference and made a part of this ISA.

23.0 ~~Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day to day reliability and operational security. All Transmission Providers, Interconnected Transmission Owners, market participants, and Interconnection Customers interconnected with electric systems are to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber security practices. All interconnection parties agree to comply with all infrastructure security requirements of the North American Electric Reliability Corporation.~~

IN WITNESS WHEREOF, Transmission Provider, Interconnection Customer and Interconnected Transmission Owner have caused this ISA to be executed by their respective authorized officials.

(PJM Queue Position #____)

Transmission Provider: **PJM Interconnection, L.L.C.**

By: _____
Name Title Date

Printed name of signer: _____

Interconnection Customer: **[Name of Party]**

By: _____
Name Title Date

Printed name of signer: _____

Interconnected Transmission Owner: **[Name of Party]**

By: _____
Name Title Date

Printed name of signer: _____

**SPECIFICATIONS FOR
INTERCONNECTION SERVICE AGREEMENT**

**By and Among
PJM INTERCONNECTION, L.L.C.**

And

_____ **[Name of Interconnection Customer]**

And

_____ **[Name of Interconnected Transmission Owner]**

(PJM Queue Position # ____)

1.0 Description of [generating unit(s)] [Merchant Transmission Facilities] (the Customer Facility) to be interconnected with the Transmission System in the PJM Region:

a. Name of Customer Facility:

b. Location of Customer Facility:

c. Size in megawatts of Customer Facility:

{The following language should be included only for generating units

For Generation Interconnection Customer:

Maximum Facility Output of _____MW }

{The following language applies when a Generation Interconnection Request involves an increase of the capacity of an existing generating facility:

The stated size of the generating unit includes an increase in the Maximum Facility Output of the generating unit of __ MW over Interconnection Customer's previous interconnection. This increase is a result of the Interconnection Request associated with this Interconnection Service Agreement. }

{The following language should be included only for Merchant Transmission Facilities

For Transmission Interconnection Customer:

Nominal Rated Capability: _____MW}

d. Description of the equipment configuration:

2.0 Rights

[for Generation Interconnection Customers]

2.1 Capacity Interconnection Rights: {this section will not apply if the Customer Facility is exclusively an Energy Resource and thus is granted no CIRs; see alternate section 2.1 below}

Pursuant to and subject to the applicable terms of the Tariff, the Interconnection Customer shall have Capacity Interconnection Rights at the Point(s) of Interconnection specified in this Interconnection Service Agreement in the amount of ___ MW. {Instructions: this number is the total of the Capacity Interconnection Rights that are granted as a result of the Interconnection Request, plus any prior Capacity Interconnection Rights }

{include the following language when the projected Initial Operation is in advance of the study year used for the System Impact Study and Capacity Interconnection Rights are only interim until the study year: }

Pursuant to and subject to the applicable terms of the Tariff, the Interconnection Customer shall have Capacity Interconnection Rights at the Point(s) of Interconnection specified in this Interconnection Service Agreement in the amount of ___ MW commencing _____. During the time period from the effective date of this ISA until _____ (the “interim time period”), the Interconnection Customer may be awarded interim Capacity Interconnection Rights in the amount not to exceed _____ MW. The availability and amount of such interim Capacity Interconnection Rights shall be dependent upon completion and the results of an interim deliverability study. Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on _____.

{include the following language to the extent applicable for interconnection of additional generation at an existing generating facility: }

The amount of Capacity Interconnection Rights specified above (____ MW) includes ____ MW of Capacity Interconnection Rights that the Interconnection Customer had at the same Point(s) of Interconnection prior to its Interconnection Request associated with this Interconnection Service Agreement, and ____MW of Capacity Interconnection Rights granted as a result of such Interconnection Request.

{include the following language when the CIRs are only interim and have a termination date or event:}

Interconnection Customer shall have ____ MW of Capacity Interconnection Rights for the time period from ____ to _____. These Capacity Interconnection Rights are interim and will terminate upon {explain circumstances -- e.g. interim agreement; completion of another facility, etc.}

2.1a To the extent that any portion of the Customer Facility described in section 1.0 is not a Capacity Resource with Capacity Interconnection Rights, such portion of the Customer Facility shall be an Energy Resource. PJM reserves the right to limit total injections to the Maximum Facility Output in the event reliability would be affected by output greater than such quantity.

{this version of section 2.1 will be used in lieu of section 2.1 above when a generating facility will be an Energy Resource and therefore will not be granted any CIRs:}

[2.1 The generating unit(s) described in section 1.0 shall be an Energy Resource. Pursuant to this Interconnection Service Agreement, the generating unit will be permitted to inject ____ MW (nominal) into the system. PJM reserves the right to limit injections to this quantity in the event reliability would be affected by output greater than such quantity.]

[for Transmission Interconnection Customers]

2.1 Transmission Injection Rights: [applicable only to Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with a control area outside PJM]

Pursuant to Section 232 of the Tariff, Interconnection Customer shall have Transmission Injection Rights at each indicated Point of Interconnection in the following quantity(ies):

2.2 Transmission Withdrawal Rights: [applicable only to Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with a control area outside PJM]

Pursuant to Section 232 of the Tariff, Interconnection Customer shall have Transmission Withdrawal Rights at each indicated Point of Interconnection in the following quantity(ies):

[Include Section 2.2A only if customer is interconnecting Controllable A.C. Merchant Transmission Facilities]

2.2A Interconnection Customer is interconnecting Controllable A.C. Merchant Transmission Facilities as defined in the appended Section 1.6B of the Tariff, and has elected, pursuant to the appended Section 41.1 of the Tariff, to receive Transmission Injection Rights and Transmission Withdrawal Rights in lieu of the other applicable rights for which it may be eligible under Subpart C of Part VI of the Tariff. Accordingly, Interconnection Customer hereby agrees that the Transmission Injection Rights and Transmission Withdrawal Rights awarded to it pursuant to the Tariff and this ISA are, and throughout the duration of this ISA shall be, conditioned on Interconnection Customer's continuous operation of its Controllable A.C. Merchant Transmission Facilities in a controllable manner, i.e., in a manner effectively the same as operation of D.C. transmission facilities.

2.3 Incremental Deliverability Rights:

Pursuant to Section 235 of the Tariff, Interconnection Customer shall have Incremental Deliverability Rights at each indicated Point of Interconnection in the following quantity(ies):

2.4 Incremental Available Transfer Capability Revenue Rights:

Pursuant to Section 233 of the Tariff, Interconnection Customer shall have Incremental Available Transfer Capability Revenue Rights at each indicated Point of Interconnection in the following quantities:

2.5 Incremental Auction Revenue Rights:

Pursuant to Section 231 of the Tariff, Interconnection Customer shall have Incremental Auction Revenue Rights in the following quantities:

2.6 Incremental Capacity Transfer Rights:

Pursuant to Section 234 of the Tariff, Interconnection Customer shall have Incremental Capacity Transfer Rights between the following associated source(s) and sink(s) in the indicated quantities:

3.0 Construction Responsibility and Ownership of Interconnection Facilities

a. Interconnection Customer.

(1) Interconnection Customer shall construct and, unless otherwise indicated, shall own, the following Interconnection Facilities:

[Specify Facilities To Be Constructed]

(2) In the event that, in accordance with the Interconnection Construction Service Agreement, Interconnection Customer has exercised the Option to Build, it is hereby permitted to build in accordance with and subject to the conditions and limitations set forth in that Section, the following portions of the Transmission Owner Interconnection Facilities which constitute or are part of the Customer Facility:

[Specify Facilities To Be Constructed]

Ownership of the facilities built by Interconnection Customer pursuant to the Option to Build shall be as provided in the Interconnection Construction Service Agreement.

- b. Interconnected Transmission Owner {or Name of Interconnected Transmission Owner if more than one Interconnected Transmission Owner }

[Specify Facilities To Be Constructed and Owned]

- c. [if applicable, include the following][Name of any additional Transmission Owner constructing facilities with which Interconnection Customer and Transmission Provider will also execute an Interconnection Construction Service Agreement]

[Specify Facilities To Be Constructed and Owned]

4.0 Subject to modification pursuant to the Negotiated Contract Option and/or the Option to Build under the Interconnection Construction Service Agreement, Interconnection Customer shall be subject to the estimated charges detailed below, which shall be billed and paid in accordance with Appendix 2, Section 11 of this ISA and the applicable Interconnection Construction Service Agreement.

4.1 Attachment Facilities Charge: \$_____

[Optional: Provide Charge and Identify Interconnected Transmission Owner]

4.2 Network Upgrades Charge: \$_____

[Optional: Provide Breakdown of Charge Based on Interconnected Transmission Owner responsibilities]

4.3 Local Upgrades Charge: \$_____

[Optional: Provide Breakdown of Charge Based on Interconnected Transmission Owner responsibilities]

4.4 Other Charges: \$ _____

[Optional: Provide Breakdown of Charge Based on Interconnected Transmission Owner responsibilities]

4.5 Cost breakdown:

\$ Direct Labor
\$ Direct Material
\$ Indirect Labor
\$ Indirect Material

[Additional items for breakdown as necessary]

\$ Total

4.6 Security Amount Breakdown:

\$ _____ Estimated Cost of Non-Direct Connection Local Upgrades and/or Non-Direct Connection Network Upgrades

plus \$ _____ Estimated cost of the work (for the first three months after construction commences in earnest) on the required Attachment Facilities, Direct Connection Local Upgrades, and Direct Connection Network Upgrades

plus \$ _____ Option to Build Security for Attachment Facilities, Direct Connection Local Upgrades, and Direct Connection Network Upgrades (including Cancellation Costs)

{Use if Interconnected Transmission Owner work will be completed in the first quarter:

\$ _____ Costs included for three-month work completion estimate Security x 0.25}

\$ _____ Total Security required with ISA (this value should be in Section 5.0 of this ISA)

less \$ _____ Costs already paid by Interconnection Customer

\$ _____ Total Security **{if the resultant is negative, use: reduction with this ISA; if the resultant is zero or positive use: required with this ISA}**

APPENDICES:

- **APPENDIX 1 - DEFINITIONS**
- **APPENDIX 2 - STANDARD TERMS AND CONDITIONS FOR INTERCONNECTIONS**

SCHEDULES:

- **SCHEDULE A - CUSTOMER FACILITY LOCATION/SITE PLAN**
- **SCHEDULE B - SINGLE-LINE DIAGRAM**
- **SCHEDULE C - LIST OF METERING EQUIPMENT**
- **SCHEDULE D - APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS**
- **SCHEDULE E - SCHEDULE OF CHARGES**
- **SCHEDULE F - SCHEDULE OF NON-STANDARD TERMS & CONDITIONS**
- **SCHEDULE G - INTERCONNECTION CUSTOMER'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS**
- **SCHEDULE H - INTERCONNECTION REQUIREMENTS FOR A WIND GENERATION FACILITY**

4.4 ~~{Reserved.}~~ **Transmission Interconnection Customer Obligations:**

A Transmission Interconnection Customer that will be a Merchant Transmission Provider is subject to the terms and conditions in Tariff, Section 38.

4.8 Under- and Over-Frequency and Under- and Over-Frequency Voltage Conditions:

The Generation Interconnection Customer shall ensure “frequency ride through” capability and “voltage ride through” capability of its Customer Facility. The Generation Interconnection Customer shall enable these capabilities such that its Customer Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition, as tested pursuant to Section 1.4.4 of Appendix 2 of this Interconnection Service Agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the PJM Region on a comparable basis. The Customer Facility’s protective equipment settings shall comply with the Transmission Provider’s automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term “ride through” as used herein shall mean the ability of a Customer Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term “frequency ride through” as used herein shall mean the ability of a Generation Interconnection Customer’s Customer Facility to stay connected to and synchronized with the Transmission System or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the PJM Region on a comparable basis. The term “voltage ride through” as used herein shall mean the ability of a Customer Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the PJM Region on a comparable basis.

The Transmission System is designed to automatically activate a load-shed program as required by NERC and each Applicable Regional Entity in the event of an under-frequency system disturbance. A Generation Interconnection Customer shall implement under-frequency and over-frequency relay set points for the Customer Facility as required by NERC and each Applicable Regional Entity to ensure “frequency ride through” capability of the Transmission System. The response of a Generation Interconnection Customer’s Customer Facility to frequency deviations of predetermined magnitudes, both under-frequency and over-frequency deviations shall be studied and coordinated with the Transmission Provider in accordance with Good Utility Practice.

4.9 System Protection and System-Power Quality

4.9.1 System Protection:

Interconnection Customer shall, at its expense, install, operate and maintain such System Protection Facilities as may be required in connection with operation of the Customer Facility and the Customer Interconnection Facilities consistent with Applicable Technical Requirements and Standards. Interconnected Transmission Owner shall install any System Protection Facilities that may be required, as determined by Transmission Provider, on the Transmission Owner Interconnection Facilities or the Transmission System in connection with the operation of the Customer Facility and the Customer Interconnection Facilities. Responsibility for the cost of any System Protection Facilities required on the Transmission Owner Interconnection Facilities or the Transmission System shall be allocated as provided in Section 217 of the Tariff.

4.9.2 Power Quality:

The Customer Facility and Customer Interconnection Facilities shall not cause excessive deviations from the power quality criteria set forth in the Applicable Technical Requirements and Standards.

11.2 Costs for Transmission Owner Interconnection Facilities:

The following provisions shall apply with respect to charges for the Costs of the Interconnected Transmission Owner for which the Interconnection Customer is responsible.

11.2.1 Adjustments to Security:

The Security provided by Interconnection Customer at or before execution of the Interconnection Service Agreement (a) shall be reduced as portions of the work ~~on required Local Upgrades and/or Network Upgrades is~~ are completed, and/or (b) shall be increased or decreased as required to reflect adjustments to Interconnection Customer's cost responsibility, as determined in accordance with Section 217, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals.

11.2.2 Invoice:

The Interconnected Transmission Owner shall provide Transmission Provider a quarterly statement of the Interconnected Transmission Owner's scheduled expenditures during the next three months for, as applicable (a) the design, engineering and construction of, and/or for other charges related to, construction of the Interconnection Facilities for which the Interconnected Transmission Owner is responsible under the Interconnection Service Agreement and the Interconnection Construction Service Agreement, or (b) in the event that the Interconnection Customer exercises the Option to Build pursuant to Section 3.2.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P to the Tariff), for the Transmission Owner's Costs associated with the Interconnection Customer's building Attachment Facilities, Local Upgrades, and Network Upgrades (including both Direct Connection Network Upgrades, Direct Connection Local Upgrades, Non-Direct Connection Network Upgrades and Non-Direct Connection Local Upgrades), including but not limited to Costs for tie-in work and Cancellation Costs. Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities to satisfy itself that the Interconnection Customer is complying with the Transmission Owner's standards and specifications for the construction of facilities) only if the Transmission Owner and the Interconnection Customer mutually agree to the inclusion of such costs under the Option to Build pursuant to the provisions of Section 3.3.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P to the Tariff). Transmission Provider shall bill Interconnection Customer on behalf of the Interconnected Transmission Owner, for the Interconnected Transmission Owner's expected Costs during the subsequent three months. Interconnection Customer shall pay each bill within twenty (20) days after receipt thereof. Upon receipt of each of Interconnection Customer's payments of such bills, Transmission Provider shall reimburse the Interconnected Transmission Owner. Interconnection Customer may request that the Transmission Provider provide a quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Section 11.2.3 of this Appendix 2 shall govern the timing of the final cost reconciliation upon completion of the work.

11.2.3 Final Invoice:

Within 120 days after the Interconnected Transmission Owner completes construction and installation of the Interconnection Facilities for which the Interconnected Transmission Owner is responsible under the Interconnection Service Agreement and the Interconnection Construction Service Agreement, Transmission Provider shall provide Interconnection Customer with an accounting of, and the appropriate Construction Party shall make any payment to the other that is necessary to resolve, any difference between (a) Interconnection Customer's responsibility under the Tariff for the actual Cost of such facilities, and (b) Interconnection Customer's previous aggregate payments to Transmission Provider for the Costs of such facilities. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment to either the Interconnection Customer or the Interconnected Transmission Owner that the preceding sentence requires it to make unless and until the Transmission Provider has received the payment that it is required to refund from the Construction Party owing the payment.

11.2.4 Disputes:

In the event of a billing dispute between any of the Construction Parties, Transmission Provider and the Interconnected Transmission Owner shall continue to perform their respective obligations pursuant to this Interconnection Service Agreement and any related Interconnection Construction Service Agreements so long as (a) Interconnection Customer continues to make all payments not in dispute, and (b) the Security held by the Transmission Provider while the dispute is pending exceeds the amount in dispute, or (c) Interconnection Customer pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Interconnection Customer fails to meet any of these requirements, then Transmission Provider shall so inform the other Construction Parties and Transmission Provider or the Interconnected Transmission Owner may provide notice to Interconnection Customer of a Breach pursuant to Section 15 of this Appendix 2.

13.1 Required Coverages For Generation Resources Of More Than 20 Megawatts or Merchant Transmission Facilities:

Each Interconnected Entity shall maintain insurance as described in paragraphs ~~(a)A~~ through ~~(e)E~~ below. All insurance shall be procured from insurance companies rated “A-,” VII or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities are located. Failure to maintain required insurance shall be a Breach of the Interconnection Service Agreement.

~~(a)A-~~ Workers Compensation insurance with statutory limits, as required by the state and/or jurisdiction in which the work is to be performed, and employer's liability insurance with limits of not less than one million dollars (\$1,000,000.~~00~~).

~~(b)B-~~ Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising , products and completed operations coverage, independent contractors coverage, liability assumed under an insured contract, coverage for pollution to the extent normally available and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) products and completed operations aggregate.

~~(c)C-~~ Business/Commercial Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of one million dollars (\$1,000,000) each accident for bodily injury, including death, and property damage.

~~(d)D-~~ Excess and/or Umbrella Liability Insurance with a limit of liability of not less than twenty million dollars (\$20,000,000.~~00~~) per occurrence. These limits apply in excess of the employer’s liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or via a combination of primary, excess and/or umbrella insurance.

~~(e)E-~~ Professional Liability Insurance providing errors, omissions and/or malpractice coverage in the amount of five million dollars (\$5,000,000) per occurrence/aggregate. Coverage shall be provided for the Interconnected Entity’s duties, responsibilities and performance outlined in this Appendix 2, the Interconnection Service Agreement, and if applicable, the Interconnection Construction Service Agreement.

An Interconnected Entity may meet the Professional Liability Insurance requirements by requiring third-party contractors, designers, or engineers, or other parties that are responsible for design work associated with the transmission facilities or Interconnection Facilities necessary for the interconnection to procure professional liability insurance in the amounts and upon the terms prescribed by this section 13.1~~(e)E~~, and providing evidence of such insurance to the other Interconnected Entity. Such insurance shall be procured from companies rated “A-,” VII or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities are located. Nothing in this section relieves the Interconnected Entity from complying

with the insurance requirements. In the event that the policies of the designers, engineers, or other parties used to satisfy the Interconnected Entity's insurance obligations under this section become invalid for any reason, including but not limited to, (i) the policy(ies) lapsing or otherwise terminating or expiring; (ii) the coverage limits of such policy(ies) are decreased; or (iii) the policy(ies) do not comply with the terms and conditions of the Tariff; Interconnected Entity shall be required to procure insurance sufficient to meet the requirements of this section, such that there is no lapse in insurance coverage. Notwithstanding the foregoing, in the event an Interconnected Entity will not design or construct or cause to design or construct any new transmission facilities or Interconnection Facilities, Transmission Provider, in its discretion, may waive the requirement that an Interconnected Entity maintain the Professional Liability Insurance pursuant to this section.

13.1A. Required Coverages For Generation Resources Of 20 Megawatts Or Less:

Each Interconnected Entity shall maintain the types of insurance as described in section 13.1 paragraphs ~~A-(a)~~ through ~~E-(e)~~ in an amount sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. Additional insurance may be required by the Interconnection Customer, as a function of owning and operating a generating facility. All insurance shall be procured from insurance companies rated “A-,” VII or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities are located. Failure to maintain required insurance shall be a Breach of the Interconnection Service Agreement.

SCHEDULE D

APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS

[\[Reference the appropriate PJM and TO technical standards\]](#)

2.3 Construction By Interconnection Customer

2.3.1 Construction Prior to Execution of Interconnection Construction Service Agreement:

If the Interconnection Customer procures materials for, and/or commences construction of, the Customer Interconnection Facilities, any Transmission Owner Interconnection Facilities, ~~or any Merchant Network Upgrades~~ that it has elected to construct by exercising the Option to Build under Section 3.2.3 of this Appendix 2, or for any subsequent modification thereto, prior to the execution of the Interconnection Construction Service Agreement or, if the Interconnection Construction Service Agreement has been executed, before the Interconnected Transmission Owner and Transmission Provider have accepted the Interconnection Customer's initial design, or any subsequent modification to the design, of such Interconnection Facilities ~~and/or Merchant Network Upgrades~~, such procurement and/or construction shall be at the Interconnection Customer's sole risk, cost and expense.

2.3.2 Monitoring and Inspection:

The Interconnected Transmission Owner may monitor construction and installation of Interconnection Facilities ~~and/or Merchant Network Upgrades~~ that the Interconnection Customer is constructing. Upon reasonable notice, authorized personnel of the Interconnected Transmission Owner may inspect any or all of such Interconnection Facilities ~~and/or Merchant Network Upgrades~~ to assess their conformity with Applicable Standards.

2.3.3 Notice of Completion:

The Interconnection Customer shall notify the Transmission Provider and the Interconnected Transmission Owner in writing when it has completed construction of (i) the Customer Facility; (ii) the Customer Interconnection Facilities; and (iii) any Transmission Owner Interconnection Facilities ~~and/or any Merchant Network Upgrades~~ for which it has exercised the Option to Build under Section 3 of this Appendix 2.

3.4 Suspension:

The following provision applies to Interconnection Requests which have entered the New Services Queue prior to February 1, 2011:

Interconnection Customer shall have the right, upon written notice to Transmission Provider and Interconnected Transmission Owner, to suspend at any time all work by Interconnected Transmission Owner associated with the construction and installation of the Transmission Owner Interconnection Facilities required under an Interconnection Service Agreement or Interconnection Construction Service Agreement, with the condition that, notwithstanding such suspension, the Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Provider's safety and reliability criteria. This suspension right permits the Interconnection Customer to request one or more suspensions of work for a cumulative period of up to three years ~~for each Interconnection Request~~. Interconnection Customer's notice of suspension shall include an estimated duration of the suspension and other information related to the suspension.

The following provision applies to Interconnection Requests which have entered the New Services Queue on or after February 1, 2011:

Interconnection Customer shall have the right, upon written notice to Transmission Provider and Interconnected Transmission Owner, to suspend at any time all work by Interconnected Transmission Owner associated with the construction and installation of the Transmission Owner Interconnection Facilities required under an Interconnection Service Agreement or Interconnection Construction Service Agreement, with the condition that, notwithstanding such suspension, the Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Provider's safety and reliability criteria. This suspension right permits the Interconnection Customer to request one or more suspensions of work for a cumulative period of up to (i) three years ~~for an Interconnection Request for which~~if the Transmission Provider determines that such suspension would not be deemed a Material Modification, or (ii) one year ~~for an Interconnection Request for which~~if the Transmission Provider determines that such suspension would be deemed a Material Modification. Interconnection Customer's notice of suspension shall include an estimated duration of the suspension and other information related to the suspension.

3.4.1 Costs:

In the event of a suspension under this section, Interconnection Customer shall be responsible for all reasonable and necessary Cancellation Costs which Interconnected Transmission Owner or Transmission Provider (i) has incurred pursuant to the Interconnection Service Agreement or Interconnection Construction Service Agreement prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and/or labor contracts which Interconnected Transmission Owner or Transmission Provider cannot reasonably avoid; provided, however, that prior to

cancelling or suspending any such material, equipment or labor contract, Interconnected Transmission Owner or Transmission Provider, as the case may be, shall obtain Interconnection Customer's authorization to do so. Transmission Provider shall invoice Interconnection Customer pursuant to Section 9 of this Appendix 2 for Cancellation Costs for which the customer is liable under this section. Interconnected Transmission Owner and Transmission Provider shall use due diligence to minimize Cancellation Costs in the event of a suspension of work.

3.4.2 Duration of Suspension:

In the event Interconnection Customer suspends work by Interconnected Transmission Owner required under an Interconnection Service Agreement or Interconnection Construction Service Agreement pursuant to this Section 3.4, and has not requested Transmission Provider and the Interconnected Transmission Owner to recommence the work required under the applicable agreement(s) on or before the expiration of the time period allowed under this Section 3.4 following commencement of such suspension, the Interconnection Construction Service Agreement and the Interconnection Service Agreement for the Interconnection Request for which Interconnection Customer suspended work shall be deemed terminated as of the end of such suspension time period. The suspension time shall begin on the date the suspension is requested, or on the date of Interconnection Customer's written notice of suspension to Transmission Provider, if no effective date was specified.

9.1 Adjustments to Security:

The Security provided by Interconnection Customer at or before execution of the Interconnection Service Agreement (a) shall be reduced as portions of the work ~~on required Local Upgrades and/or Network Upgrades is~~ are completed, and/or (b) shall be increased or decreased as required to reflect adjustments to Interconnection Customer's cost responsibility, as determined in accordance with Section 217, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals.

11.1 Required Coverages For Generation Resources Of More Than 20 Megawatts or Merchant Transmission Facilities:

Each Constructing Entity shall maintain, at its own expense, insurance as described in paragraphs ~~A(a)~~ through ~~E(e)~~ below. All insurance shall be procured from insurance companies rated “A-,” VII or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities will be located. Failure to maintain required insurance shall be a Breach of the Interconnection Construction Service Agreement.

~~A(a)~~ Workers Compensation Insurance with statutory limits, as required by the state and/or jurisdiction in which the work is to be performed, and employer’s liability insurance with limits of not less than one million dollars (\$1,000,000).

~~B(b)~~ Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising , products and completed operations coverage, independent contractors coverage, ~~liability~~ liability assumed under an insured contract, coverage for pollution to the extent normally available and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) products and completed operations aggregate.

~~C(c)~~ Business/Commercial Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of not less than one million dollars (\$1,000,000) each accident for bodily injury, including death, and property damage.

~~D(d)~~ Excess and/or Umbrella Liability Insurance with a limit of liability of twenty million dollars (\$20,000,000-00) per occurrence. These limits apply in excess of the employer’s liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or via a combination of primary, excess and/or umbrella insurance.

~~E(e)~~ Professional Liability, including Contractors Legal Liability, providing errors, omissions and/or malpractice coverage. Coverage shall be provided for the Constructing Entity’s duties, responsibilities and performance outlined in this Interconnection Construction Service Agreement, with limits of liability as follows:

\$10,000,000 each occurrence
\$10,000,000 aggregate

An Interconnected Entity may meet the Professional Liability Insurance requirements by requiring third-party contractors, designers, or engineers, or other parties that are responsible for design work associated with the transmission facilities or Interconnection Facilities necessary for the interconnection to procure professional liability insurance in the amounts and upon the terms prescribed by this section 11.1(~~eE~~), and providing evidence of such insurance to the other Interconnected Entity. Such insurance shall be procured from companies rated “A-,” VII or

better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities are located. Nothing in this section relieves the Interconnected Entity from complying with the insurance requirements. In the event that the policies of the designers, engineers, or other parties used to satisfy the Interconnected Entity's insurance obligations under this section become invalid for any reason, including but not limited to, (i) the policy(ies) lapsing or otherwise terminating or expiring; (ii) the coverage limits of such policy(ies) are decreased; or (iii) the policy(ies) do not comply with the terms and conditions of the Tariff; Interconnected Entity shall be required to procure insurance sufficient to meet the requirements of this section, such that there is no lapse in insurance coverage. Notwithstanding the foregoing, in the event an Interconnected Entity will not design or construct or cause to design or construct any new transmission facilities or Interconnection Facilities, Transmission Provider, in its discretion, may waive the requirement that an Interconnected Entity maintain the Professional Liability Insurance pursuant to this section.

11.1A. Required Coverages For Generation Resources Of 20 Megawatts Or Less:

Each Constructing Entity shall maintain the types of insurance as described in section 11.1 paragraphs ~~A(a)~~ through ~~E(e)~~ above in an amount sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. Additional insurance may be required by the Interconnection Customer, as a function of owning and operating a generating facility. All insurance shall be procured from insurance companies rated “A-,” VII or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities are located. Failure to maintain required insurance shall be a Breach of the Interconnection Construction Service Agreement.

11.5 Notices; Certificates of Insurance:

Prior to the commencement of work pursuant to this Agreement, the Constructing Entities agree to furnish each other Construction Party with certificates of insurance evidencing the insurance coverage obtained in accordance with this Section 11. All certificates of insurance shall indicate that the certificate holder is included as an additional insured under the Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability coverages, and that this insurance is primary with a waiver of subrogation in favor of the other Interconnected Entities. All policies of insurance shall provide for thirty days prior written notice of cancellation or material adverse change. If the policies of insurance do not or cannot be endorsed to provide thirty days prior written ~~notice~~notice of cancellation or material adverse change, each Construction Entity shall provide the other Construction Entities with thirty days prior written notice of cancellation or material adverse change to any of the insurance required in this agreement.

SCHEDULE K

APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS

[Reference the appropriate PJM and TO technical standards]

ATTACHMENT S

**Form of
Transmission Interconnection Feasibility Study Agreement**

RECITALS

1. This Transmission Interconnection Feasibility Study Agreement, dated as of _____, is entered into, by and between _____ (“Interconnection Customer”) and PJM Interconnection, L.L.C. (“Transmission Provider”) pursuant to Part IV of the PJM Interconnection, L.L.C. Open Access Transmission Tariff (“PJM Tariff”). Capitalized terms used in this agreement, unless otherwise indicated, shall have the meanings ascribed to them in the PJM Tariff.

2. Pursuant to Section 36.1.03 of the PJM Tariff, the Interconnection Customer has submitted an Interconnection Request and has paid the applicable deposit to the Transmission Provider, for a proposed interconnection of Merchant Transmission Facilities.

3. Interconnection Customer requests interconnection to the Transmission System of Merchant Transmission Facilities with the following specifications.
 - a. Location of proposed facilities:

 - b. Substation(s) where Interconnection Customer proposes to interconnect or add its facilities:

 - c. Proposed voltage and nominal capability of new facilities or increase in capability of existing facilities:

 - d. Description of proposed facilities and equipment:

 - e. Planned date the proposed facilities or increase in capability will be in service:

 - f. ~~(1) Are these proposed Merchant Transmission Facilities?~~

~~_____ Yes _____ No _____~~

~~(2) If Yes, w~~ Will the proposed facilities be Merchant A.C. or Merchant D.C. Transmission Facilities or Controllable A.C. Merchant Transmission Facilities?

A.C. _____ or D.C. _____ or Controllable A.C. _____

~~g.~~ i. If the proposed facilities will be Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, does Interconnection Customer elect to receive:

EITHER

_____ (1) Firm or Non-Firm Transmission Injection Rights (TIR) and/or Firm or Non-Firm Transmission Withdrawal Rights (TWR).

OR

_____ (2) Incremental Deliverability Rights, Incremental Auction Revenue Rights and Incremental Available Transfer Capability Revenue Rights.

If Interconnection Customer elects (1) above, it must provide the following:

_____ Total project MW's to be evaluated as Firm (capacity) injection for TIR.

_____ Total project MW's to be evaluated as Non-firm (energy) injection for TIR.

_____ Total project MW's to be evaluated as Firm (capacity) withdrawal for TWR.

_____ Total project MW's to be evaluated a Non-firm (energy) withdrawal for TWR.

If Interconnection Customer elects (2) above, it must state the location on the Transmission System where it proposes to receive Incremental Deliverability Rights associated with Its proposed facilities:

~~h.~~ ii. If the proposed facilities will be Controllable A.C. Merchant Transmission Facilities, and provided that Interconnection Customer

Transmission Owners to interconnect with the Interconnection Customer or construct any facilities or upgrades.

CONFIDENTIALITY

6. The Interconnection Customer agrees to provide all information requested by the Transmission Provider necessary to complete the Transmission Interconnection Feasibility Study. Subject to paragraph 7 of this Transmission Interconnection Feasibility Study Agreement and to the extent required by Section 222 of the PJM Tariff, information provided pursuant to this Section 6 shall be and remain confidential.
7. Until completion of the Transmission Interconnection Feasibility Study, the Transmission Provider shall keep confidential all information provided to it by the Interconnection Customer. Upon completion of the Transmission interconnection Feasibility Study, the study will be listed on the Transmission Provider's website and, to the extent required by Commission regulations, will be make publicly available upon request, except that the identity of the Interconnection Customer shall remain confidential and will not be posted on the Transmission Provider's website.
8. Interconnection Customer acknowledges that, consistent with Part IV and Part VI of the PJM Tariff, the Transmission Provider may contract with consultants, including the Transmission Owners, to provide services or expertise in the Transmission Interconnection Feasibility Study process and that the Transmission Provider may disseminate information to the Transmission Owners.

COST RESPONSIBILITY

9. The Interconnection Customer shall reimburse the Transmission Provider for the actual cost of the Transmission Interconnection Feasibility Study. The refundable portion of the deposit paid by the Interconnection Customer pursuant to Section 36.1.03 of the PJM Tariff shall be applied toward the Interconnection Customer's Transmission Interconnection Feasibility Study cost responsibility. Pursuant to Section 36.1.03, during the deficiency review of this Agreement, in the event that the Transmission Provider anticipates that the actual study costs will exceed the refundable portion of the deposit described in Section 36.1.03 of the PJM Tariff, 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. If the Transmission Provider sends the Interconnection Customer notification of estimated additional study costs during the deficiency review period (as described in Section 36.1.03), then the Interconnection Customer must either: (1) withdraw the Transmission Interconnection Request during the deficiency response period; or (2) pay all estimated additional study costs prior to the

expiration of the deficiency response period. If the Interconnection Customer fails to complete either (1) or (2), then the Transmission Interconnection Request shall be deemed to be terminated and withdrawn. 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, the Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

10. In analyzing and preparing the Transmission Interconnection Feasibility Study, the Transmission Provider, the Transmission Owner(s), and any other subcontractors employed by the Transmission Provider shall have to rely on information provided by the Interconnection Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY THE TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE FEASIBILITY STUDY. The Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Transmission Interconnection Feasibility Study Agreement nor the Transmission Interconnection Feasibility Study prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by the Transmission Provider or the Transmission Owner(s) to provide any transmission or interconnection service to or on behalf of the Interconnection Customer either at this point in time or in the future.
11. In no event will the Transmission Provider, Transmission Owner(s) or other subcontractors employed by the Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this Transmission Interconnection Feasibility Study Agreement or otherwise, even if the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider have been advised of the possibility of such a loss. Nor shall the Transmission Provider, Transmission Owner(s) or other subcontractors employed by the Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of the Transmission

Provider's obligations under this Transmission Interconnection Feasibility Study Agreement.

Without limitation of the foregoing, the Interconnection Customer further agrees that Transmission Owner(s) and other subcontractors employed by the Transmission Provider to prepare or assist in the preparation of any Transmission Interconnection Feasibility Study shall be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty/Limitation of Liability."

MISCELLANEOUS

- 12. Any notice or request made to or by either party regarding this Transmission Interconnection Feasibility Study Agreement shall be made to the representative of the other party as indicated below.

Transmission Provider
PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403

Interconnection Customer

- 13. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this Transmission Interconnection Feasibility Study Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 14. This Transmission Interconnection Feasibility Study Agreement or any part thereof, may not be amended, modified, or waived other than by a writing signed by all parties hereto.
- 15. This Transmission Interconnection Feasibility Study Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.
- 16. Neither this Transmission Interconnection Feasibility Study Agreement nor the Transmission Interconnection Feasibility Study performed hereunder shall be construed as an application for service under Part II or Part III of the PJM Tariff.
- 17. The provisions of the PJM Tariff are incorporated herein and made a part hereof.
- 18. **Governing Law, Regulatory Authority, and Rules**
The validity, interpretation and enforcement of this Transmission Interconnection Feasibility Study Agreement and each of its provisions shall be governed by the laws of the state of _____ (where the Point of Interconnection is located),

without regard to its conflicts of law principles. This Transmission Interconnection Feasibility Study Agreement is subject to all Applicable Laws and Regulations. Each party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

19. No Third-Party Beneficiaries

This Transmission Interconnection Feasibility Study Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the parties, and the obligations herein assumed are solely for the use and benefit of the parties, their successors in interest and where permitted, their assigns.

20. Multiple Counterparts

This Transmission Interconnection Feasibility Study Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

21. No Partnership

This Transmission Interconnection Feasibility Study Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the parties or to impose any partnership obligation or partnership liability upon either party. Neither party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other party.

22. Severability

If any provision or portion of this Transmission Interconnection Feasibility Study Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the parties shall negotiate in good faith to restore insofar as practicable the benefits to each party that were affected by such ruling, and (3) the remainder of this Transmission Interconnection Feasibility Study Agreement shall remain in full force and effect.

23. Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Transmission Interconnection Feasibility Study Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Transmission Interconnection Feasibility Study Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each party shall have the right to protest any such filing by the other party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Transmission Interconnection Feasibility Study Agreement shall limit the rights of the parties or of

FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Transmission Provider and the Interconnection Customer have caused this Transmission Interconnection Feasibility Study Agreement to be executed by their respective authorized officials.

Transmission Provider

By: _____
Name Title Date

Interconnection Customer

By: _____
Name Title Date

Attachment Y

**Form of Screens Process Interconnection Request
(For Generation Facilities of 2 MW or less synchronous 5 MW or less inverter-based)**

1.0 Instructions

Interconnection Customer must submit the Screens Process Interconnection Request to Transmission Provider by hand delivery, mail, e-mail, or fax.

2.0 Processing Fee or Deposit:

Interconnection Customer is required to provide the Transmission Provider the applicable deposit. A portion of the deposit is non-refundable pursuant to Section 112A.

The base and initial per MW deposit received will be credited toward the amount of the Generation Interconnection Customer's cost responsibility pursuant to Section 112A.

3.0 Interconnection Customer Information

Legal Name of the Interconnection Customer (or, if an individual, individual's name)

Name: _____

Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Facility Location (if different from above): _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Alternative Contact Information (if different from the Interconnection Customer)

Contact Name: _____

Title: _____

Address: _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

4.0 Energy Resource Information

Will the Energy Resource be used for any of the following?

Net Metering? Yes ___ No ___

To Supply Power to the Interconnection Customer? Yes ___ No ___

To Supply Power to Others? Yes ___ No ___

For installations at locations with existing electric service to which the proposed Energy Resource will interconnect, provide:

(Local Electric Service Provider)

Contact Name: _____

Title: _____

Address: _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Requested Point of Interconnection: _____

Interconnection Customer's Requested In-Service Date: _____

Energy Source: ___ Solar ___ Wind ___ Hydro ___ Hydro Type (e.g. Run-of-River): _____
Diesel ___ Natural Gas ___ Fuel Oil ___ Other (state type) _____

Prime Mover: ___ Fuel Cell ___ Recip Engine ___ Gas Turb ___ Steam Turb
___ Microturbine ___ PV ___ Other

Type of Generator: ___ Synchronous ___ Induction ___ Inverter

Generator Nameplate Rating: _____ kW (Typical) Generator Nameplate kVAR: _____

Interconnection Customer or Customer-Site Load: _____ kW (if none, so state)

Typical Reactive Load (if known): _____

Maximum Physical Export Capability Requested: _____ kW

List components of the Small Energy Resource equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Is the prime mover compatible with the certified protective relay package? ___Yes ___No

Generator (or solar collector)

Manufacturer, Model Name & Number: _____

Version Number: _____

Nameplate Output Power Rating in kW: (Summer) _____ (Winter) _____

Nameplate Output Power Rating in kVA: (Summer) _____ (Winter) _____

Individual Generator Power Factor

Rated Power Factor: Leading: _____ Lagging: _____

Total Number of Generators in wind farm to be interconnected pursuant to this

Interconnection Request: _____ Elevation: _____ ___Single phase ___Three phase

Inverter Manufacturer, Model Name & Number (if used): _____

List of adjustable set points for the protective equipment or software: _____

Note: A completed Power Systems Load Flow data sheet must be supplied with the Interconnection Request.

5.0 Energy Resource Characteristic Data (for inverter-based machines)

Max design fault contribution current: _____ Instantaneous ___ or RMS? ___

Harmonics Characteristics: _____

Start-up requirements: _____

6.0 Energy Resource Characteristic Data (for rotating machines)

RPM Frequency: _____

(*) Neutral Grounding Resistor (If Applicable): _____

Synchronous Generators:

Direct Axis Synchronous Reactance, X_d : _____ P.U.

Direct Axis Transient Reactance, X'_d : _____ P.U.

Direct Axis Subtransient Reactance, X''_d : _____ P.U.

Negative Sequence Reactance, X_2 : _____ P.U.

Zero Sequence Reactance, X_0 : _____ P.U.

KVA Base: _____

Field Volts: _____

Field Amperes: _____

Induction Generators:

Motoring Power (kW): _____

I²t or K (Heating Time Constant): _____

Rotor Resistance, R_r : _____

Stator Resistance, R_s : _____

Stator Reactance, X_s : _____

Rotor Reactance, X_r : _____

Magnetizing Reactance, X_m : _____

Short Circuit Reactance, X_d'' : _____

Exciting Current: _____

Temperature Rise: _____

Frame Size: _____

Design Letter: _____

Reactive Power Required In Vars (No Load): _____

Reactive Power Required In Vars (Full Load): _____

Total Rotating Inertia, H: _____ Per Unit on kVA Base

Note: Please contact the Transmission Provider prior to submitting the Interconnection Request to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the appropriate regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

7.0 Interconnection Facilities Information

Will a transformer be used between the generator and the point of common coupling? Yes No

Will the transformer be provided by the Interconnection Customer? Yes No

Transformer Data (If Applicable, for Interconnection Customer-Owned Transformer):

Is the transformer: single phase three phase? Size: _____ kVA

Transformer Impedance: _____ % on _____ kVA Base

If Three Phase:

Transformer Primary: _____ Volts Delta Wye Wye Grounded

Transformer Secondary: _____ Volts Delta Wye Wye Grounded

Transformer Tertiary: _____ Volts Delta Wye Wye Grounded

Transformer Fuse Data (If Applicable, for Interconnection Customer-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: _____ Type: _____ Size: _____ Speed: _____

Interconnecting Circuit Breaker (if applicable):

Manufacturer: _____ Type: _____

Load Rating (Amps): _____ Interrupting Rating (Amps): _____ Trip Speed (Cycles): _____

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

	Setpoint Function	
	Minimum	Maximum
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Current Transformer Data (If Applicable):

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Potential Transformer Data (If Applicable):

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

8.0 Diagrams and Site Control Documentation

Enclose copy of site electrical one-line diagram showing the configuration of all Energy Resource equipment, current and potential circuits, and protection and control schemes. This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Energy Resource is larger than 50 kW. Is one-line diagram enclosed? ___Yes ___No

Enclose copy of any site documentation that indicates the precise physical location of the proposed Energy Resource (e.g., USGS topographic map or other diagram or documentation).

Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address) _____

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is available documentation enclosed? ___Yes ___No

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).
Are schematic drawings enclosed? ___Yes ___No

Provide demonstration of site control through an exclusive option to purchase the property on which the generation project is to be developed, a property deed, or a range of tax or corporate documents that identify property ownership. Site control must either be in the name of the party submitting the generation interconnection request or documentation must be provided establishing the business relationship between the project developer and the party having site control.

Interconnection Customer hereby certifies that, to the best of my knowledge, all the information provided in this Screens Process Interconnection Request is true and correct.

IN WITNESS WHEREOF, the Transmission Provider and the Interconnection Customer have caused this Screens Process Interconnection Request Agreement to be executed by their respective authorized officials.

Transmission Provider: **PJM Interconnection, L.L.C.**

By: _____
Name Title Date

Printed name of signer: _____

Interconnection Customer: [Name of Party]

By: _____
Name Title Date

Printed name of signer: _____

ATTACHMENT BB

**Form of Interconnection Service Agreement for
Certified Inverter-Based Generating Facility**

This Certified Inverter-Based Generating Facility Interconnection Service Agreement (“Agreement”) is entered into between PJM Interconnection, L.L.C. (“Transmission Provider”), _____ (“Interconnected Transmission Owner”), and _____ (“Interconnection Customer”).

1.0 Processing Fee

Concurrent with tendering this Agreement to Transmission Provider, Interconnection Customer shall pay a non-refundable processing fee of \$500.

2.0 Interconnection Customer

Name: _____

Contact Person: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Contact Information (if different from Interconnection Customer)

Name: _____

Contact Person: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

3.0 Small Inverter Facility Information

Location: _____

Electric Service Company: _____

Customer Account Number: _____

Inverter Manufacturer: _____ Model _____

Nameplate Rating: _____ (kW) _____ (kVA) _____ (AC Volts)

Single Phase _____ Three Phase _____

System Design Capacity: _____ (kW) _____ (kVA)

Prime Mover: Photovoltaic ____ Reciprocating Engine ____ Fuel Cell ____
Turbine ____ Other _____

Energy Source: Solar ____ Wind ____ Hydro ____ Diesel ____ Natural Gas ____
Fuel Oil ____ Other (describe) _____

Is the equipment UL1741 Listed? Yes ____ No ____

If Yes, attach manufacturer's cut-sheet showing UL1741 listing

Interconnection Customer or Customer-Site Load: _____ kW (zero, if none)

Maximum Physical Export Capability Requested: _____ kW

Estimated Installation Date: _____ Estimated In-Service Date: _____

Owner of the Small Inverter Facility _____ (include % ownership by any electric utility):

4.0 Certification of Small Inverter Facility

The Interconnection Customer represents and warrants that the Small Inverter Facility which is the subject of this Agreement is no larger than 10 kW and it meets the codes, standards, and certification requirements of Attachments Z and AA of the PJM Open Access Transmission Tariff ("Tariff"), or in lieu of such representation and warranty, the Transmission Provider has reviewed the design or tested the proposed Small Inverter Facility and is satisfied that it is safe to operate.

The following is a list of components of the Small Inverter Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

5.0 Authority and Incorporation of Tariff.

This Agreement is entered into pursuant to Part IV of the Tariff. Interconnection Customer has requested an Certified Inverter-Based Generating Facility Interconnection Service Agreement under the Tariff and Transmission Provider has determined that Interconnection Customer is eligible under the Tariff to obtain this Agreement. The standard terms and conditions for interconnection of Small Inverter Facilities as set forth in section 112B the Tariff as of the date of this Agreement are attached as Appendix A to this Agreement and are hereby specifically

incorporated as provisions of this Agreement. Transmission Provider, Interconnected Transmission Owner and Interconnection Customer agree to and assume all of the rights and obligations of the Transmission Provider, Interconnected Transmission Owner and Interconnection Customer, respectively, as set forth in the appended provisions of section 112B.

6.0 Effective Date.

This Agreement shall become effective on the date it is executed by the Transmission Provider and shall terminate on such date as mutually agreed upon by the parties,

7.0 Assumption of Tariff Obligations.

Interconnection Customer agrees to abide by all rules and procedures pertaining to generation and transmission in the PJM Region, including but not limited to the rules and procedures concerning the dispatch of generation or scheduling transmission set forth in the Tariff, the Operating Agreement and the PJM Manuals.

8.0 Waiver.

No waiver by either party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.

9.0 Amendment.

This Agreement or any part thereof, may not be amended, modified, assigned, or waived other than by a writing signed by all parties hereto.

10. Critical Infrastructure.

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All Transmission Providers, Interconnected Transmission Owner, market participants, and Interconnection Customers interconnected with electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.

11. PJM Queue Number

The PJM queue number associated with this Agreement is _____.

12. Site Control

Concurrent with tendering this Agreement to Transmission Provider, Interconnection Customer shall submit documentation of site control.

IN WITNESS WHEREOF, Transmission Provider, Interconnection Customer and Interconnected Transmission Owner have caused this Agreement to be executed by their respective authorized officials.

Transmission Provider: **PJM Interconnection, L.L.C.**

By: _____
Name Title Date

Printed name of signer: _____

Interconnection Customer: **[Name of Party]**

By: _____
Name Title Date

Printed name of signer: _____

Interconnected Transmission Owner: **[Name of Party]**

By: _____
Name Title Date

Printed name of signer: _____

ATTACHMENT CC

**Form of Certificate of Completion
(Small Generating Inverter Facility No Larger Than 10 kW)**

Is the Small Generating Inverter Facility owner-installed? Yes _____ No _____

Interconnection Customer: _____

Contact Person: _____

Address: _____

Location of the Small Generating Inverter Facility (if different from above):

City: _____ State: _____ Zip Code: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Electrician:

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

License number: _____

Date Approval to Install Small Inverter Facility granted by Transmission Provider:

PJM Queue Number:

Inspection:

The Small Generating Inverter Facility has been installed and inspected in compliance with the local building/electrical code of _____

Signed (Local electrical wiring inspector, or attach signed electrical inspection):

Print Name: _____

Date: _____

As a condition of interconnection, you are required to send/fax a copy of this form along with a copy of the signed electrical permit to (insert Transmission Provider information below):

Name: _____

Company: _____

Address: _____

City, State ZIP: _____

Fax: _____

Approval to Energize the Small Generating Inverter Facility (For Transmission Provider use only)

Energizing the Small Generating Inverter Facility is approved contingent upon the Terms and Conditions set forth in section 112B of the Tariff and the Interconnection Customer's Small Inverter ISA for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW.

Transmission Provider Signature: _____

By: _____
Name Title ÷
_____ Date

Printed name of signer: _____

6.0 Schedule Of Work.

6.1 Standard Option.

The Transmission Owner shall use Reasonable Efforts to design, engineer, procure, construct and install the Direct Assignment Facilities or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, in accordance with the Schedule and Scope of Work.

6.1.1 Negotiated Contract Option.

As an alternative to the Standard Option set forth in Section 6.1 of this Appendix III, the Transmission Owner and the New Service Customer may mutually agree to a Negotiated Contract Option for the Transmission Owner's design, procurement, construction and installation of the Customer-Funded Upgrades. Under the Negotiated Contract Option, the Upgrade Customer and the Transmission Owner may agree to terms different from those included in the Standard Option of Section 6.1 above and the corresponding standard terms set forth in the applicable provisions of Part VI of the Tariff and this Appendix III. Under the Negotiated Contract Option, negotiated terms may include the work schedule applicable to the Transmission Owner's construction activities and changes to same; payment provisions, including the schedule of payments; incentives, penalties and/or liquidated damages related to timely completion of construction; use of third party contractors; and responsibility for Costs, but only as between the Upgrade Customer and the Transmission Owner that are parties to this Upgrade CSA; no other New Service Customer's responsibility for Costs may be affected (Section 217 of the Tariff). No other terms of the Tariff or this Appendix III shall be subject to modification under the Negotiated Contract Option. The terms and conditions of the Tariff that may be negotiated pursuant to the Negotiated Contract Option shall not be affected by use of the Negotiated Contract Option except as and to the extent that they are modified by the parties' agreement pursuant to such option. All terms agreed upon pursuant to the Negotiated Contract Option shall be stated in full in an appendix to this Upgrade CSA.

6.2 Option to Build.

6.2.1 Option.

In the event that the New Service Customer and the affected Transmission Owner are unable to agree on terms for the construction of facilities required to accommodate the customer's New Service Request by such date as is reasonable in the light of the schedule for construction of such facilities, as set forth in the Facilities Study, or if mutually agreed by the New Service Customer and the affected Transmission Owner, the New Service Customer shall have the right, but not the obligation ("Option to Build"), to design, procure, construct and install all or any portion of the Direct Assignment Facilities and/or Customer-Funded Upgrades. In order to exercise this Option to Build, the New Service Customer must provide Transmission Provider and the Transmission Owner with written notice of its election to exercise the option and indicate its election to exercise the option in this Upgrade CSA.

6.2.2 General Conditions Applicable to Option.

In addition to the other terms and conditions applicable to the construction of facilities under this Appendix III, the Option to Build is subject to the following conditions:

(a) The New Service Customer must obtain or arrange to obtain all necessary permits and authorizations for the construction and installation of the Direct Assignment Facilities or Customer-Funded Upgrades that it is building, provided, however, that when the Transmission Owner's assistance is required, the Transmission Owner shall assist the New Service Customer in obtaining such necessary permits or authorizations with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring permits and authorizations for construction of facilities on its own behalf;

(b) The New Service Customer must obtain all necessary land rights for the construction and installation of the Direct Assignment Facilities or Customer-Funded Upgrades that it is building, provided, however, that upon New Service Customer's reasonable request, the Transmission Owner shall assist the New Service Customer in acquiring such land rights with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring land rights for construction of facilities on its own behalf;

(c) Notwithstanding anything stated herein, each Transmission Owner shall have the exclusive right and obligation to perform the line attachments (tie-in work), and to calibrate remote terminal units and relay settings, required for the interconnection to such Transmission Owner's existing facilities of any Direct Assignment Facilities or Customer-Funded Upgrades that the New Service Customer builds; and

(d) The Direct Assignment Facilities or Customer-Funded Upgrades built by the New Service Customer shall be successfully inspected, tested and energized pursuant to Sections 19 and 20 of this Appendix III.

6.2.3 Additional Conditions Regarding Network Facilities.

To the extent that the New Service Customer utilizes the Option to Build for design, procurement, construction and/or installation of (a) any Merchant Network Upgrades, (b) Local Upgrades or Network Upgrades to Transmission System facilities that are in existence or under construction by or on behalf of the Transmission Owner on the date that the New Service Customer solicits bids under Section 6.2.7 below, or (c) Direct Assignment Facilities or Customer-Funded Upgrades that are to be located on land or in right-of-way owned or controlled by the Transmission Owner, and in addition to the other terms and conditions applicable to the design, procurement, construction and/or installation of facilities under this Appendix III, all work shall comply with the following further conditions:

(i) All work performed by or on behalf of the New Service Customer shall be conducted by contractors, and using equipment manufacturers or vendors, that are listed on the Transmission Owner's List of Approved Contractors;

(ii) The Transmission Owner shall have full site control of, and reasonable access to, its property at all times for purposes of tagging or operation, maintenance, repair or construction of modifications to, its existing facilities and/or for performing all tie-ins of Direct Assignment Facilities or Customer-Funded Upgrades built by or for the New Service Customer; and for acceptance testing of any equipment that will be owned and/or operated by the Transmission Owner;

(iii) The Transmission Owner shall have the right to have a reasonable number of appropriate representatives present for all work done on its property/facilities or regarding the Direct Assignment Facilities or Customer-Funded Upgrades, and the right to stop, or to order corrective measures with respect to, any such work that reasonably could be expected to have an adverse effect on reliability, safety or security of persons or of property of the Transmission Owner or any portion of the Transmission System, provided that, unless circumstances do not reasonably permit such consultations, the Transmission Owner shall consult with the New Service Customer and with Transmission Provider before directing that work be stopped or ordering any corrective measures;

(iv) The New Service Customer and its contractors, employees and agents shall comply with the Transmission Owner's safety, security and work rules, environmental guidelines and training requirements applicable to the area(s) where construction activity is occurring and shall provide all reasonably required documentation to the Transmission Owner, provided that the Transmission Owner previously has provided its safety, security and work rules and training requirements applicable to work on its facilities to Transmission Provider and the New Service Customer within 20 Business Days after a request therefore made by New Service Customer following its receipt of the Facilities Study;

(v) The New Service Customer shall be responsible for controlling the performance of its contractors, employees and agents; and

(vi) All activities performed by or on behalf of the New Service Customer pursuant to its exercise of the Option to Build shall be subject to compliance with Applicable Laws and Regulations, including those governing union staffing and bargaining unit obligations, and Applicable Standards.

6.2.4 Administration of Conditions.

To the extent that a Transmission Owner exercises any discretion in the application of any of the conditions stated in Sections 6.2.2 and 6.2.3 of this Appendix III, it shall apply each such condition in a manner that is reasonable and not unduly discriminatory and it shall not unreasonably withhold, condition, or delay any approval or authorization that the New Service Customer may require for the purpose of complying with any of those conditions.

6.2.5 Approved Contractors.

(a) Each Transmission Owner shall develop and shall provide to Transmission Provider a List of Approved Contractors. Each Transmission Owner shall include on its List of

Approved Contractors no fewer than three contractors and no fewer than three manufacturers or vendors of major transmission-related equipment, unless a Transmission Owner demonstrates to Transmission Provider's reasonable satisfaction that it is feasible only to include a lesser number of construction contractors, or manufacturers or vendors, on its List of Approved Contractors. Transmission Provider shall publish each Transmission Owner's List of Approved Contractors in a PJM Manual and shall make such manual available on its internet website.

(b) Upon request of a New Service Customer, a Transmission Owner shall add to its List of Approved Contractors (1) any design or construction contractor regarding which the New Service Customer provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate contractor is qualified to design, or to install and/or construct new facilities or upgrades or modifications to existing facilities on the Transmission Owner's system, or (2) any manufacturer or vendor of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) regarding which the New Service Customer provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate entity's major transmission-related equipment is acceptable for installation and use on the Transmission Owner's system. No Transmission Owner shall unreasonably withhold, condition, or delay its acceptance of a contractor, manufacturer, or vendor proposed for addition to its List of Approved Contractors.

6.2.6 Construction by Multiple New Service Customers:

In the event that there are multiple New Service Customers that wish to exercise an Option to Build with respect to facilities of the types described in Section 6.2.3 to this Appendix III, the Transmission Provider shall determine how to allocate the construction responsibility among them unless they reach agreement among themselves on how to proceed.

6.2.7 Option Procedures

(a) Within 10 days after notifying Transmission Provider and the Transmission Owner of its election to exercise the Option to Build, New Service Customer shall solicit bids from one or more Approved Contractors named on the Transmission Owner's List of Approved Contractors to procure equipment for, and/or to design, construct and/or install, the Direct Assignment Facilities or Customer-Funded Upgrades that the New Service Customer seeks to build under the Option to Build on terms (i) that will meet the New Service Customer's proposed schedule; (ii) that, if the New Service Customer seeks to have an Approved Contractor construct or install Direct Assignment Facilities or Customer-Funded Upgrades, will satisfy all of the conditions on construction specified in Sections 6.2.2 and 6.2.3 of this Appendix III; and (iii) that will satisfy the obligations of a Constructing Entity (other than those relating to responsibility for the costs of facilities) under this Upgrade CSA.

(b) Any additional costs arising from the bidding process or from the final bid of the successful Approved Contractor shall be the sole responsibility of the New Service Customer.

(c) Upon receipt of a qualifying bid acceptable to it, the New Service Customer shall contract with the Approved Contractor that submitted the qualifying bid. Such contract shall meet the standards stated in paragraph (a) of this section.

(d) In the absence of a qualifying bid acceptable to the New Service Customer in response to its solicitation, the Transmission Owner(s) shall be responsible for the design, procurement, construction and installation of the Direct Assignment Facilities or Customer-Funded Upgrades in accordance with the Standard Option described in Section 6.2.1 of this Appendix III.

6.2.8 New Service Customer Drawings.

New Service Customer shall submit to the Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Direct Assignment Facilities or Customer-Funded Upgrades that New Service Customer arranges to build under the Option to Build. The Transmission Owner and Transmission Provider shall review the drawings to assess the consistency of New Service Customer's design of the pertinent Direct Assignment Facilities or Customer-Funded Upgrades with Applicable Standards and the Facilities Study. After consulting with the Transmission Owner, Transmission Provider shall provide comments on such drawings to New Service Customer within sixty days after its receipt thereof, after which time any drawings not subject to comment shall be deemed to be approved. All drawings provided hereunder shall be deemed to be Confidential Information.

6.2.9 Effect of Review.

Transmission Owner's and Transmission Provider's reviews of New Service Customer's initial drawings of the Direct Assignment Facilities and/or Customer-Funded Upgrades that the New Service Customer is building shall not be construed as confirming, endorsing or providing a warranty as to the fitness, safety, durability or reliability of such facilities or the design thereof. At its sole cost and expense, New Service Customer shall make such changes to the design of the pertinent Direct Assignment Facilities and/or Customer-Funded Upgrades as may reasonably be required by Transmission Provider, in consultation with the Transmission Owner, to ensure that the Direct Assignment Facilities or Customer-Funded Upgrades that New Service Customer is building meet Applicable Standards and conform with the Facilities Study.

6.3 Revisions to Schedule and Scope of Work.

The Schedule and Scope of Work shall be revised as required in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals, or otherwise by mutual agreement of the Transmission Provider and Transmission Owner, which agreement shall not be unreasonably withheld, conditioned or delayed.

6.4 Suspension.

The following provision applies to New Service Requests which have entered the New Services Queue prior to February 1, 2011:

New Service Customer shall have the right, upon written notice to Transmission Provider and Transmission Owner, to suspend at any time all work by the Transmission Owner associated with the construction and installation of the Direct Assignment Facilities and/or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, required under this Upgrade CSA, with the condition that, notwithstanding such suspension, the Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Provider's safety and reliability criteria. This suspension right permits the New Service Customer to request one or more suspensions of work for a cumulative period of up to three years ~~for each request~~. New Service Customer's notice of suspension shall include an estimated duration of the suspension and other information related to the suspension.

The following provision applies to New Service Requests which have entered the New Services Queue on or after February 1, 2011:

New Service Customer shall have the right, upon written notice to Transmission Provider and Transmission Owner, to suspend at any time all work by the Transmission Owner associated with the construction and installation of the Direct Assignment Facilities and/or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, required under this Upgrade CSA, with the condition that, notwithstanding such suspension, the Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Provider's safety and reliability criteria. This suspension right permits the New Service Customer to request one or more suspensions of work for a cumulative period of up to (i) three years ~~if for a request for which~~ the Transmission Provider determines that such suspension would not be deemed a Material Modification, or (ii) one year ~~for a request for which~~ if the Transmission Provider determines that such suspension would be deemed a Material Modification. New Service Customer's notice of suspension shall include an estimated duration of the suspension and other information related to the suspension.

6.4.1 Costs.

In the event of a suspension under this section, New Service Customer shall be responsible for all reasonable and necessary Cancellation Costs which the Transmission Owner or Transmission Provider: (i) has incurred pursuant to this Upgrade CSA prior to the suspension; and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and/or labor contracts which Transmission Owner or Transmission Provider cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, the Transmission Owner or Transmission Provider, as the case may be, shall obtain New Service Customer's authorization to do so. Upon the request of the New Service Customer, the Transmission Owner shall provide an estimate of the Cancellation Costs. Transmission Provider shall invoice New Service Customer for Cancellation Costs for which the customer is liable under this section. Transmission Owner and Transmission Provider shall use due diligence to minimize Cancellation Costs in the event of a suspension of work.

6.4.2 Duration of Suspension.

If the Transmission Owner suspends work on the Direct Assignment Facilities and/or Customer-Funded Upgrades required under this Upgrade CSA pursuant to this Section 6.4.2, and the New Service Customer has not requested Transmission Provider and the Transmission Owner to recommence the work required under the applicable agreement(s) on or before the expiration of the time period allowed under this Section 6.4 following commencement of such suspension, then this Upgrade CSA shall terminate. The suspension time period shall begin on the date of the New Service Customer's written notice of suspension to Transmission Provider and Transmission Owner.

Attachment C

Revisions to PJM Open Access Transmission Tariff
(Clean Tariff)

TABLE OF CONTENTS

I. COMMON SERVICE PROVISIONS

- 1** **Definitions**
 - OATT Definitions – A – B**
 - OATT Definitions – C – D**
 - OATT Definitions – E – F**
 - OATT Definitions – G – H**
 - OATT Definitions – I – J – K**
 - OATT Definitions – L – M – N**
 - OATT Definitions – O – P – Q**
 - OATT Definitions – R – S**
 - OATT Definitions - T – U – V**
 - OATT Definitions – W – X – Y - Z**
- 2** **Initial Allocation and Renewal Procedures**
- 3** **Ancillary Services**
- 3B** **PJM Administrative Service**
- 3C** **Mid-Atlantic Area Council Charge**
- 3D** **Transitional Market Expansion Charge**
- 3E** **Transmission Enhancement Charges**
- 3F** **Transmission Losses**
- 4** **Open Access Same-Time Information System (OASIS)**
- 5** **Local Furnishing Bonds**
- 6** **Reciprocity**
- 6A** **Counterparty**
- 7** **Billing and Payment**
- 8** **Accounting for a Transmission Owner’s Use of the Tariff**
- 9** **Regulatory Filings**
- 10** **Force Majeure and Indemnification**
- 11** **Creditworthiness**
- 12** **Dispute Resolution Procedures**
- 12A** **PJM Compliance Review**

II. POINT-TO-POINT TRANSMISSION SERVICE

Preamble

- 13** **Nature of Firm Point-To-Point Transmission Service**
- 14** **Nature of Non-Firm Point-To-Point Transmission Service**
- 15** **Service Availability**
- 16** **Transmission Customer Responsibilities**
- 17** **Procedures for Arranging Firm Point-To-Point Transmission Service**
- 18** **Procedures for Arranging Non-Firm Point-To-Point Transmission Service**
- 19** ***Firm Transmission Feasibility Study Procedures For Long-Term Firm Point-To-Point Transmission Service Requests***
- 20** **[Reserved]**

- 21 [Reserved]
- 22 Changes in Service Specifications
- 23 Sale or Assignment of Transmission Service
- 24 Metering and Power Factor Correction at Receipt and Delivery Points(s)
- 25 Compensation for Transmission Service
- 26 Stranded Cost Recovery
- 27 Compensation for New Facilities and Redispatch Costs
- 27A Distribution of Revenues from Non-Firm Point-to-Point Transmission Service

III. NETWORK INTEGRATION TRANSMISSION SERVICE

Preamble

- 28 Nature of Network Integration Transmission Service
- 29 Initiating Service
- 30 Network Resources
- 31 Designation of Network Load
- 32 *Firm Transmission Feasibility* Study Procedures For Network Integration Transmission Service Requests
- 33 Load Shedding and Curtailments
- 34 Rates and Charges
- 35 Operating Arrangements

IV. INTERCONNECTIONS WITH THE TRANSMISSION SYSTEM

Preamble

Subpart A –INTERCONNECTION PROCEDURES

- 36 Interconnection Requests
- 37 Additional Procedures
- 38 Service on Merchant Transmission Facilities
- 39 Local Furnishing Bonds

40-108 [Reserved]

Subpart B – [Reserved]

Subpart C – [Reserved]

Subpart D – [Reserved]

Subpart E – [Reserved]

Subpart F – [Reserved]

Subpart G – SMALL GENERATION INTERCONNECTION PROCEDURE

Preamble

- 109 Pre-application Process
- 110 Permanent Capacity Resource Additions Of 20 MW Or Less
- 111 Permanent Energy Resource Additions Of 20 MW Or Less but Greater than 2 MW (Synchronous) or Greater than 5 MW(Inverter-based)
- 112 Temporary Energy Resource Additions Of 20 MW Or Less But Greater Than 2 MW
- 112A Screens Process for Permanent or Temporary Energy Resources of 2 MW or less (Synchronous) or 5 MW (Inverter-based)

- 112B Certified Inverter-Based Small Generating Facilities No Larger than 10 kW
- 112C [Reserved]

V. GENERATION DEACTIVATION

Preamble

- 113 Notices
- 114 Deactivation Avoidable Cost Credit
- 115 Deactivation Avoidable Cost Rate
- 116 Filing and Updating of Deactivation Avoidable Cost Rate
 - 117 Excess Project Investment Required
 - 118 Refund of Project Investment Reimbursement
 - 118A Recovery of Project Investment
 - 119 Cost of Service Recovery Rate
 - 120 Cost Allocation
 - 121 Performance Standards
 - 122 Black Start Units
 - 123-199 [Reserved]

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

Preamble

- 200 Applicability
- 201 Queue Position
 - Subpart A – SYSTEM IMPACT STUDIES AND FACILITIES STUDIES FOR NEW SERVICE REQUESTS**
 - 202 Coordination with Affected Systems
 - 203 System Impact Study Agreement
 - 204 Tender of System Impact Study Agreement
 - 205 System Impact Study Procedures
 - 206 Facilities Study Agreement
 - 207 Facilities Study Procedures
 - 208 Expedited Procedures for Part II Requests
 - 209 Optional Interconnection Studies
 - 210 Responsibilities of the Transmission Provider and Transmission Owners
 - Subpart B– AGREEMENTS AND COST REPONSIBILITY FOR CUSTOMER- FUNDED UPGRADES**
 - 211 Interim Interconnection Service Agreement
 - 212 Interconnection Service Agreement
 - 213 Upgrade Construction Service Agreement
 - 214 Filing/Reporting of Agreement
 - 215 Transmission Service Agreements
 - 216 Interconnection Requests Designated as Market Solutions
 - 217 Cost Responsibility for Necessary Facilities and Upgrades
 - 218 New Service Requests Involving Affected Systems
 - 219 Inter-queue Allocation of Costs of Transmission Upgrades

- 220 Advance Construction of Certain Network Upgrades
- 221 Transmission Owner Construction Obligation for Necessary Facilities And Upgrades
- 222 Confidentiality
- 223 Confidential Information
- 224 – 229 [Reserved]
- Subpart C – RIGHTS RELATED TO CUSTOMER-FUNDED UPGRADES
- 230 Capacity Interconnection Rights
- 231 Incremental Auction Revenue Rights
- 232 Transmission Injection Rights and Transmission Withdrawal Rights
- 233 Incremental Available Transfer Capability Revenue Rights
- 234 Incremental Capacity Transfer Rights
- 235 Incremental Deliverability Rights
- 236 Interconnection Rights for Certain Transmission Interconnections
- 237 IDR Transfer Agreements

SCHEDULE 1

Scheduling, System Control and Dispatch Service

SCHEDULE 1A

Transmission Owner Scheduling, System Control and Dispatch Service

SCHEDULE 2

Reactive Supply and Voltage Control from Generation Sources Service

SCHEDULE 3

Regulation and Frequency Response Service

SCHEDULE 4

Energy Imbalance Service

SCHEDULE 5

Operating Reserve – Synchronized Reserve Service

SCHEDULE 6

Operating Reserve - Supplemental Reserve Service

SCHEDULE 6A

Black Start Service

SCHEDULE 7

Long-Term Firm and Short-Term Firm Point-To-Point Transmission Service

SCHEDULE 8

Non-Firm Point-To-Point Transmission Service

SCHEDULE 9

PJM Interconnection L.L.C. Administrative Services

SCHEDULE 9-1

Control Area Administration Service

SCHEDULE 9-2

Financial Transmission Rights Administration Service

SCHEDULE 9-3

Market Support Service

SCHEDULE 9-4

Regulation and Frequency Response Administration Service
SCHEDULE 9-5
Capacity Resource and Obligation Management Service
SCHEDULE 9-6
Management Service Cost
SCHEDULE 9-FERC
FERC Annual Charge Recovery
SCHEDULE 9-OPSI
OPSI Funding
SCHEDULE 9-CAPS
CAPS Funding
SCHEDULE 9-FINCON
Finance Committee Retained Outside Consultant
SCHEDULE 9-MMU
MMU Funding
SCHEDULE 9 – PJM SETTLEMENT
SCHEDULE 10 - [Reserved]
SCHEDULE 10-NERC
North American Electric Reliability Corporation Charge
SCHEDULE 10-RFC
Reliability First Corporation Charge
SCHEDULE 11
[Reserved for Future Use]
SCHEDULE 11A
Additional Secure Control Center Data Communication Links and Formula Rate
SCHEDULE 12
Transmission Enhancement Charges
SCHEDULE 12 APPENDIX
SCHEDULE 12-A
SCHEDULE 13
Expansion Cost Recovery Change (ECRC)
SCHEDULE 14
Transmission Service on the Neptune Line
SCHEDULE 14 - Exhibit A
SCHEDULE 15
Non-Retail Behind The Meter Generation Maximum Generation Emergency
Obligations
SCHEDULE 16
Transmission Service on the Linden VFT Facility
SCHEDULE 16 Exhibit A
SCHEDULE 16 – A
Transmission Service for Imports on the Linden VFT Facility
SCHEDULE 17
Transmission Service on the Hudson Line
SCHEDULE 17 - Exhibit A
ATTACHMENT A

Form of Service Agreement For Firm Point-To-Point Transmission Service
ATTACHMENT A-1
Form of Service Agreement For The Resale, Reassignment or Transfer of Point-to-Point Transmission Service
ATTACHMENT B
Form of Service Agreement For Non-Firm Point-To-Point Transmission Service
ATTACHMENT C
Methodology To Assess Available Transfer Capability
ATTACHMENT C-1
Conversion of Service in the Dominion and Duquesne Zones
ATTACHMENT C-2
Conversion of Service in the Duke Energy Ohio, Inc. and Duke Energy Kentucky, Inc, (“DEOK”) Zone
ATTACHMENT D
Methodology for Completing a System Impact Study
ATTACHMENT E
Index of Point-To-Point Transmission Service Customers
ATTACHMENT F
Service Agreement For Network Integration Transmission Service
ATTACHMENT F-1
Form of Umbrella Service Agreement for Network Integration Transmission Service Under State Required Retail Access Programs
ATTACHMENT G
Network Operating Agreement
ATTACHMENT H-1
Annual Transmission Rates -- Atlantic City Electric Company for Network Integration Transmission Service
ATTACHMENT H-1A
Atlantic City Electric Company Formula Rate Appendix A
ATTACHMENT H-1B
Atlantic City Electric Company Formula Rate Implementation Protocols
ATTACHMENT H-2
Annual Transmission Rates -- Baltimore Gas and Electric Company for Network Integration Transmission Service
ATTACHMENT H-2A
Baltimore Gas and Electric Company Formula Rate
ATTACHMENT H-2B
Baltimore Gas and Electric Company Formula Rate Implementation Protocols
ATTACHMENT H-3
Annual Transmission Rates -- Delmarva Power & Light Company for Network Integration Transmission Service
ATTACHMENT H-3A
Delmarva Power & Light Company Load Power Factor Charge Applicable to Service the Interconnection Points
ATTACHMENT H-3B

Delmarva Power & Light Company Load Power Factor Charge Applicable to Service the Interconnection Points
ATTACHMENT H-3C
Delmarva Power & Light Company Under-Frequency Load Shedding Charge
ATTACHMENT H-3D
Delmarva Power & Light Company Formula Rate – Appendix A
ATTACHMENT H-3E
Delmarva Power & Light Company Formula Rate Implementation Protocols
ATTACHMENT H-3F
Old Dominion Electric Cooperative Formula Rate – Appendix A
ATTACHMENT H-3G
Old Dominion Electric Cooperative Formula Rate Implementation Protocols
ATTACHMENT H-4
Annual Transmission Rates -- Jersey Central Power & Light Company for Network Integration Transmission Service
ATTACHMENT H-4A
Other Supporting Facilities - Jersey Central Power & Light Company
ATTACHMENT H-4B
Jersey Central Power & Light Company – *[Reserved]*
ATTACHMENT H-5
Annual Transmission Rates -- Metropolitan Edison Company for Network Integration Transmission Service
ATTACHMENT H-5A
Other Supporting Facilities -- Metropolitan Edison Company
ATTACHMENT H-6
Annual Transmission Rates -- Pennsylvania Electric Company for Network Integration Transmission Service
ATTACHMENT H-6A
Other Supporting Facilities Charges -- Pennsylvania Electric Company
ATTACHMENT H-7
Annual Transmission Rates -- PECO Energy Company for Network Integration Transmission Service
ATTACHMENT H-7A
PECO Energy Company Formula Rate Template
ATTACHMENT H-7B
PECO Energy Company Monthly Deferred Tax Adjustment Charge
ATTACHMENT H-7C
PECO Energy Company Formula Rate Implementation Protocols
ATTACHMENT H-8
Annual Transmission Rates – PPL Group for Network Integration Transmission Service
ATTACHMENT H-8A
Other Supporting Facilities Charges -- PPL Electric Utilities Corporation
ATTACHMENT 8C
UGI Utilities, Inc. Formula Rate – Appendix A
ATTACHMENT 8D

UGI Utilities, Inc. Formula Rate Implementation Protocols
ATTACHMENT 8E
UGI Utilities, Inc. Formula Rate – Appendix A
ATTACHMENT H-8G
Annual Transmission Rates – PPL Electric Utilities Corp.
ATTACHMENT H-8H
Formula Rate Implementation Protocols – PPL Electric Utilities Corp.
ATTACHMENT H-9
Annual Transmission Rates -- Potomac Electric Power Company for Network
Integration Transmission Service
ATTACHMENT H-9A
Potomac Electric Power Company Formula Rate – Appendix A
ATTACHMENT H-9B
Potomac Electric Power Company Formula Rate Implementation Protocols
ATTACHMENT H-9C
Annual Transmission Rate – Southern Maryland Electric Cooperative, Inc. for
Network Integration Transmission Service
ATTACHMENT H-10
Annual Transmission Rates -- Public Service Electric and Gas Company
for Network Integration Transmission Service
ATTACHMENT H-10A
Formula Rate -- Public Service Electric and Gas Company
ATTACHMENT H-10B
Formula Rate Implementation Protocols – Public Service Electric and Gas
Company
ATTACHMENT H-11
Annual Transmission Rates -- Allegheny Power for Network Integration
Transmission Service
ATTACHMENT 11A
Other Supporting Facilities Charges - Allegheny Power
ATTACHMENT H-12
Annual Transmission Rates -- Rockland Electric Company for Network Integration
Transmission Service
ATTACHMENT H-13
Annual Transmission Rates – Commonwealth Edison Company for Network
Integration Transmission Service
ATTACHMENT H-13A
Commonwealth Edison Company Formula Rate – Appendix A
ATTACHMENT H-13B
Commonwealth Edison Company Formula Rate Implementation Protocols
ATTACHMENT H-14
Annual Transmission Rates – AEP East Operating Companies for Network
Integration Transmission Service
ATTACHMENT H-14A
AEP East Operating Companies Formula Rate Implementation Protocols
ATTACHMENT H-14B Part 1

ATTACHMENT H-14B Part 2

ATTACHMENT H-15

**Annual Transmission Rates -- The Dayton Power and Light Company
for Network Integration Transmission Service**

ATTACHMENT H-16

**Annual Transmission Rates -- Virginia Electric and Power Company
for Network Integration Transmission Service**

ATTACHMENT H-16A

Formula Rate - Virginia Electric and Power Company

ATTACHMENT H-16B

Formula Rate Implementation Protocols - Virginia Electric and Power Company

ATTACHMENT H-16C

**Virginia Retail Administrative Fee Credit for Virginia Retail Load Serving
Entities in the Dominion Zone**

ATTACHMENT H-16D – [Reserved]

ATTACHMENT H-16E – [Reserved]

ATTACHMENT H-16AA

Virginia Electric and Power Company

ATTACHMENT H-17

**Annual Transmission Rates -- Duquesne Light Company for Network Integration
Transmission Service**

ATTACHMENT H-17A

Duquesne Light Company Formula Rate – Appendix A

ATTACHMENT H-17B

Duquesne Light Company Formula Rate Implementation Protocols

ATTACHMENT H-17C

Duquesne Light Company Monthly Deferred Tax Adjustment Charge

ATTACHMENT H-18

Annual Transmission Rates – Trans-Allegheny Interstate Line Company

ATTACHMENT H-18A

Trans-Allegheny Interstate Line Company Formula Rate – Appendix A

ATTACHMENT H-18B

Trans-Allegheny Interstate Line Company Formula Rate Implementation Protocols

ATTACHMENT H-19

Annual Transmission Rates – Potomac-Appalachian Transmission Highline, L.L.C.

ATTACHMENT H-19A

Potomac-Appalachian Transmission Highline, L.L.C. Summary

ATTACHMENT H-19B

**Potomac-Appalachian Transmission Highline, L.L.C. Formula Rate
Implementation Protocols**

ATTACHMENT H-20

**Annual Transmission Rates – AEP Transmission Companies (AEPTCo) in the AEP
Zone**

ATTACHMENT H-20A

**AEP Transmission Companies (AEPTCo) in the AEP Zone - Formula Rate
Implementation Protocols**

ATTACHMENT H-20A APPENDIX A

Transmission Formula Rate Settlement for AEPTCo

ATTACHMENT H-20B - Part I

AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate Template

ATTACHMENT H-20B - Part II

AEP Transmission Companies (AEPTCo) in the AEP Zone – Blank Formula Rate Template

ATTACHMENT H-21

Annual Transmission Rates – American Transmission Systems, Inc. for Network Integration Transmission Service

ATTACHMENT H-21A - ATSI

ATTACHMENT H-21A Appendix A - ATSI

ATTACHMENT H-21A Appendix B - ATSI

ATTACHMENT H-21A Appendix C - ATSI

ATTACHMENT H-21A Appendix C - ATSI [Reserved]

ATTACHMENT H-21A Appendix D – ATSI

ATTACHMENT H-21A Appendix E - ATSI

ATTACHMENT H-21A Appendix F – ATSI [Reserved]

ATTACHMENT H-21A Appendix G - ATSI

ATTACHMENT H-21A Appendix G – ATSI (Credit Adj)

ATTACHMENT H-21B ATSI Protocol

ATTACHMENT H-22

Annual Transmission Rates – DEOK for Network Integration Transmission Service and Point-to-Point Transmission Service

ATTACHMENT H-22A

Duke Energy Ohio and Duke Energy Kentucky (DEOK) Formula Rate Template

ATTACHMENT H-22B

DEOK Formula Rate Implementation Protocols

ATTACHMENT H-22C

Additional provisions re DEOK and Indiana

ATTACHMENT H-23

EP Rock springs annual transmission Rate

ATTACHMENT H-24

EKPC Annual Transmission Rates

ATTACHMENT H-24A APPENDIX A

EKPC Schedule 1A

ATTACHMENT H-24A APPENDIX B

EKPC RTEP

ATTACHMENT H-24A APPENDIX C

EKPC True-up

ATTACHMENT H-24A APPENDIX D

EKPC Depreciation Rates

ATTACHMENT H-24-B

EKPC Implementation Protocols

ATTACHMENT H-25

**Annual Transmission Rates – Rochelle Municipal Utilities for Network Integration
Transmission Service and Point-to-Point Transmission Service in the ComEd Zone**
ATTACHMENT H-25A
**Formula Rate Protocols for Rochelle Municipal Utilities Using a Historical Formula
Rate Template**
ATTACHMENT H-25B
**Rochelle Municipal Utilities Transmission Cost of Service Formula Rate – Appendix
A – Transmission Service Revenue Requirement**
ATTACHMENT H-26
Transource West Virginia, LLC Formula Rate Template
ATTACHMENT H-26A
Transource West Virginia, LLC Formula Rate Implementation Protocols
ATTACHMENT H-27
Annual Transmission Rates – Northeast Transmission Development, LLC
ATTACHMENT H-27A
Northeast Transmission Development, LLC Formula Rate Template
ATTACHMENT H-27B
**Northeast Transmission Development, LLC Formula Rate Implementation
Protocols**
ATTACHMENT H-28
**Annual Transmission Rates – Mid-Atlantic Interstate Transmission, LLC for
Network Integration Transmission Service**
ATTACHMENT H-28A
Mid-Atlantic Interstate Transmission, LLC Formula Rate Template
ATTACHMENT H-28B
**Mid-Atlantic Interstate Transmission, LLC Formula Rate Implementation
Protocols**
ATTACHMENT H-29
Annual Transmission Rates – Transource Pennsylvania, LLC
ATTACHMENT H-29A
Transource Pennsylvania, LLC Formula Rate Template
ATTACHMENT H-29B
Transource Pennsylvania, LLC Formula Rate Implementation Protocols
ATTACHMENT H-30
Annual Transmission Rates – Transource Maryland, LLC
ATTACHMENT H-30A
Transource Maryland, LLC Formula Rate Template
ATTACHMENT H-30B
Transource Maryland, LLC Formula Rate Implementation Protocols
ATTACHMENT H-A
**Annual Transmission Rates -- Non-Zone Network Load for Network Integration
Transmission Service**
ATTACHMENT I
Index of Network Integration Transmission Service Customers
ATTACHMENT J
PJM Transmission Zones

ATTACHMENT K

Transmission Congestion Charges and Credits

Preface

ATTACHMENT K -- APPENDIX

Preface

1. MARKET OPERATIONS

- 1.1 Introduction
- 1.2 Cost-Based Offers
- 1.2A Transmission Losses
- 1.3 [Reserved for Future Use]
- 1.4 Market Buyers
- 1.5 Market Sellers
- 1.5A Economic Load Response Participant
- 1.6 Office of the Interconnection
- 1.6A PJM Settlement
- 1.7 General
- 1.8 Selection, Scheduling and Dispatch Procedure Adjustment Process
- 1.9 Prescheduling
- 1.10 Scheduling
- 1.11 Dispatch
- 1.12 Dynamic Transfers

2. CALCULATION OF LOCATIONAL MARGINAL PRICES

- 2.1 Introduction
- 2.2 General
- 2.3 Determination of System Conditions Using the State Estimator
- 2.4 Determination of Energy Offers Used in Calculating
- 2.5 Calculation of Real-time Prices
- 2.6 Calculation of Day-ahead Prices
- 2.6A Interface Prices
- 2.7 Performance Evaluation

3. ACCOUNTING AND BILLING

- 3.1 Introduction
- 3.2 Market Buyers
- 3.3 Market Sellers
 - 3.3A Economic Load Response Participants
- 3.4 Transmission Customers
- 3.5 Other Control Areas
- 3.6 Metering Reconciliation
- 3.7 Inadvertent Interchange

4. [Reserved For Future Use]

5. CALCULATION OF CHARGES AND CREDITS FOR TRANSMISSION CONGESTION AND LOSSES

- 5.1 Transmission Congestion Charge Calculation
- 5.2 Transmission Congestion Credit Calculation
- 5.3 Unscheduled Transmission Service (Loop Flow)
- 5.4 Transmission Loss Charge Calculation
- 5.5 Distribution of Total Transmission Loss Charges

- 6. “MUST-RUN” FOR RELIABILITY GENERATION**
 - 6.1 Introduction
 - 6.2 Identification of Facility Outages
 - 6.3 Dispatch for Local Reliability
 - 6.4 Offer Price Caps
 - 6.5 [Reserved]
 - 6.6 Minimum Generator Operating Parameters – Parameter-Limited Schedules
- 6A. [Reserved]**
 - 6A.1 [Reserved]
 - 6A.2 [Reserved]
 - 6A.3 [Reserved]
- 7. FINANCIAL TRANSMISSION RIGHTS AUCTIONS**
 - 7.1 Auctions of Financial Transmission Rights
 - 7.1A Long-Term Financial Transmission Rights Auctions
 - 7.2 Financial Transmission Rights Characteristics
 - 7.3 Auction Procedures
 - 7.4 Allocation of Auction Revenues
 - 7.5 Simultaneous Feasibility
 - 7.6 New Stage 1 Resources
 - 7.7 Alternate Stage 1 Resources
 - 7.8 Elective Upgrade Auction Revenue Rights
 - 7.9 Residual Auction Revenue Rights
 - 7.10 Financial Settlement
 - 7.11 PJM Settlement as Counterparty
- 8. EMERGENCY AND PRE-EMERGENCY LOAD RESPONSE PROGRAM**
 - 8.1 Emergency Load Response and Pre-Emergency Load Response Program Options
 - 8.2 Participant Qualifications
 - 8.3 Metering Requirements
 - 8.4 Registration
 - 8.5 Pre-Emergency Operations
 - 8.6 Emergency Operations
 - 8.7 Verification
 - 8.8 Market Settlements
 - 8.9 Reporting and Compliance
 - 8.10 Non-Hourly Metered Customer Pilot
 - 8.11 Emergency Load Response and Pre-Emergency Load Response Participant Aggregation

ATTACHMENT L

List of Transmission Owners

ATTACHMENT M

PJM Market Monitoring Plan

ATTACHMENT M – APPENDIX

PJM Market Monitor Plan Attachment M Appendix

- I Confidentiality of Data and Information
- II Development of Inputs for Prospective Mitigation

- III Black Start Service
- IV Deactivation Rates
- V Opportunity Cost Calculation
- VI FTR Forfeiture Rule
- VII Forced Outage Rule
- VIII Data Collection and Verification
- ATTACHMENT M-1 (FirstEnergy)**
Energy Procedure Manual for Determining Supplier Total Hourly Energy Obligation
- ATTACHMENT M-2 (First Energy)**
Energy Procedure Manual for Determining Supplier Peak Load Share Procedures for Load Determination
- ATTACHMENT M-2 (ComEd)**
Determination of Capacity Peak Load Contributions and Network Service Peak Load Contributions
- ATTACHMENT M-2 (PSE&G)**
Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers
- ATTACHMENT M-2 (Atlantic City Electric Company)**
Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers
- ATTACHMENT M-2 (Delmarva Power & Light Company)**
Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers
- ATTACHMENT M-2 (Delmarva Power & Light Company)**
Procedures for Determination of Peak Load Contributions and Hourly Load Obligations for Retail Customers
- ATTACHMENT M-2 (Duke Energy Ohio, Inc.)**
Procedures for Determination of Peak Load Contributions, Network Service Peak Load and Hourly Load Obligations for Retail Customers
- ATTACHMENT M-2 (Virginia Electric and Power Company)**
Procedure for Determining Load Serving Entity Network Service Peak Load (NSPL) Contributions
- ATTACHMENT M-3**
Additional Procedures for Planning of Supplemental Projects
- ATTACHMENT N**
Form of Generation Interconnection Feasibility Study Agreement
- ATTACHMENT N-1**
Form of System Impact Study Agreement
- ATTACHMENT N-2**
Form of Facilities Study Agreement
- ATTACHMENT N-3**
Form of Optional Interconnection Study Agreement
- ATTACHMENT O**
Form of Interconnection Service Agreement
- 1.0 Parties

- 2.0 Authority
- 3.0 Customer Facility Specifications
- 4.0 Effective Date
- 5.0 Security
- 6.0 Project Specific Milestones
- 7.0 Provision of Interconnection Service
- 8.0 Assumption of Tariff Obligations
- 9.0 Facilities Study
- 10.0 Construction of Transmission Owner Interconnection Facilities
- 11.0 Interconnection Specifications
- 12.0 Power Factor Requirement
- 12.0A RTU
- 13.0 Charges
- 14.0 Third Party Benefits
- 15.0 Waiver
- 16.0 Amendment
- 17.0 Construction With Other Parts Of The Tariff
- 18.0 Notices
- 19.0 Incorporation Of Other Documents
- 20.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 21.0 Addendum of Interconnection Customer's Agreement
to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
- 22.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 23.0 Infrastructure Security of Electric System Equipment and Operations and Control
Hardware and Software is Essential to Ensure Day-to-Day Reliability and
Operational Security

Specifications for Interconnection Service Agreement

- 1.0 Description of [generating unit(s)] [Merchant Transmission Facilities] (the
Customer Facility) to be Interconnected with the Transmission System in the PJM
Region
- 2.0 Rights
- 3.0 Construction Responsibility and Ownership of Interconnection Facilities
- 4.0 Subject to Modification Pursuant to the Negotiated Contract Option
- 4.1 Attachment Facilities Charge
- 4.2 Network Upgrades Charge
- 4.3 Local Upgrades Charge
- 4.4 Other Charges
- 4.5 Cost breakdown
- 4.6 Security Amount Breakdown

ATTACHMENT O APPENDIX 1: Definitions

ATTACHMENT O APPENDIX 2: Standard Terms and Conditions for Interconnections

**1 Commencement, Term of and Conditions Precedent to
Interconnection Service**

- 1.1 Commencement Date
- 1.2 Conditions Precedent
- 1.3 Term

- 1.4 Initial Operation
- 1.4A Limited Operation
- 1.5 Survival
- 2 Interconnection Service**
 - 2.1 Scope of Service
 - 2.2 Non-Standard Terms
 - 2.3 No Transmission Services
 - 2.4 Use of Distribution Facilities
 - 2.5 Election by Behind The Meter Generation
- 3 Modification Of Facilities**
 - 3.1 General
 - 3.2 Interconnection Request
 - 3.3 Standards
 - 3.4 Modification Costs
- 4 Operations**
 - 4.1 General
 - 4.2 [Reserved]
 - 4.3 Interconnection Customer Obligations
 - 4.4 Transmission Interconnection Customer Obligations
 - 4.5 Permits and Rights-of-Way
 - 4.6 No Ancillary Services
 - 4.7 Reactive Power
 - 4.8 Under- and Over-Frequency and Under- and Over- Voltage Conditions
 - 4.9 System Protection and Power Quality
 - 4.10 Access Rights
 - 4.11 Switching and Tagging Rules
 - 4.12 Communications and Data Protocol
 - 4.13 Nuclear Generating Facilities
- 5 Maintenance**
 - 5.1 General
 - 5.2 [Reserved]
 - 5.3 Outage Authority and Coordination
 - 5.4 Inspections and Testing
 - 5.5 Right to Observe Testing
 - 5.6 Secondary Systems
 - 5.7 Access Rights
 - 5.8 Observation of Deficiencies
- 6 Emergency Operations**
 - 6.1 Obligations
 - 6.2 Notice
 - 6.3 Immediate Action
 - 6.4 Record-Keeping Obligations
- 7 Safety**
 - 7.1 General
 - 7.2 Environmental Releases
- 8 Metering**

- 8.1 General
- 8.2 Standards
- 8.3 Testing of Metering Equipment
- 8.4 Metering Data
- 8.5 Communications
- 9 Force Majeure**
 - 9.1 Notice
 - 9.2 Duration of Force Majeure
 - 9.3 Obligation to Make Payments
 - 9.4 Definition of Force Majeure
- 10 Charges**
 - 10.1 Specified Charges
 - 10.2 FERC Filings
- 11 Security, Billing And Payments**
 - 11.1 Recurring Charges Pursuant to Section 10
 - 11.2 Costs for Transmission Owner Interconnection Facilities
 - 11.3 No Waiver
 - 11.4 Interest
- 12 Assignment**
 - 12.1 Assignment with Prior Consent
 - 12.2 Assignment Without Prior Consent
 - 12.3 Successors and Assigns
- 13 Insurance**
 - 13.1 Required Coverages for Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
 - 13.1A Required Coverages for Generation Resources Of 20 Megawatts Or Less
 - 13.2 Additional Insureds
 - 13.3 Other Required Terms
 - 13.3A No Limitation of Liability
 - 13.4 Self-Insurance
 - 13.5 Notices; Certificates of Insurance
 - 13.6 Subcontractor Insurance
 - 13.7 Reporting Incidents
- 14 Indemnity**
 - 14.1 Indemnity
 - 14.2 Indemnity Procedures
 - 14.3 Indemnified Person
 - 14.4 Amount Owing
 - 14.5 Limitation on Damages
 - 14.6 Limitation of Liability in Event of Breach
 - 14.7 Limited Liability in Emergency Conditions
- 15 Breach, Cure And Default**
 - 15.1 Breach
 - 15.2 Continued Operation
 - 15.3 Notice of Breach

- 15.4 Cure and Default
- 15.5 Right to Compel Performance
- 15.6 Remedies Cumulative
- 16 Termination**
 - 16.1 Termination
 - 16.2 Disposition of Facilities Upon Termination
 - 16.3 FERC Approval
 - 16.4 Survival of Rights
- 17 Confidentiality**
 - 17.1 Term
 - 17.2 Scope
 - 17.3 Release of Confidential Information
 - 17.4 Rights
 - 17.5 No Warranties
 - 17.6 Standard of Care
 - 17.7 Order of Disclosure
 - 17.8 Termination of Interconnection Service Agreement
 - 17.9 Remedies
 - 17.10 Disclosure to FERC or its Staff
 - 17.11 No Interconnection Party Shall Disclose Confidential Information
 - 17.12 Information that is Public Domain
 - 17.13 Return or Destruction of Confidential Information
- 18 Subcontractors**
 - 18.1 Use of Subcontractors
 - 18.2 Responsibility of Principal
 - 18.3 Indemnification by Subcontractors
 - 18.4 Subcontractors Not Beneficiaries
- 19 Information Access And Audit Rights**
 - 19.1 Information Access
 - 19.2 Reporting of Non-Force Majeure Events
 - 19.3 Audit Rights
- 20 Disputes**
 - 20.1 Submission
 - 20.2 Rights Under The Federal Power Act
 - 20.3 Equitable Remedies
- 21 Notices**
 - 21.1 General
 - 21.2 Emergency Notices
 - 21.3 Operational Contacts
- 22 Miscellaneous**
 - 22.1 Regulatory Filing
 - 22.2 Waiver
 - 22.3 Amendments and Rights Under the Federal Power Act
 - 22.4 Binding Effect
 - 22.5 Regulatory Requirements
- 23 Representations And Warranties**

	23.1	General
24		Tax Liability
	24.1	Safe Harbor Provisions
	24.2	Tax Indemnity
	24.3	Taxes Other Than Income Taxes
	24.4	Income Tax Gross-Up
	24.5	Tax Status
ATTACHMENT O - SCHEDULE A		
		Customer Facility Location/Site Plan
ATTACHMENT O - SCHEDULE B		
		Single-Line Diagram
ATTACHMENT O - SCHEDULE C		
		List of Metering Equipment
ATTACHMENT O - SCHEDULE D		
		Applicable Technical Requirements and Standards
ATTACHMENT O - SCHEDULE E		
		Schedule of Charges
ATTACHMENT O - SCHEDULE F		
		Schedule of Non-Standard Terms & Conditions
ATTACHMENT O - SCHEDULE G		
		Interconnection Customer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status
ATTACHMENT O - SCHEDULE H		
		Interconnection Requirements for a Wind Generation Facility
ATTACHMENT O-1		
		Form of Interim Interconnection Service Agreement
ATTACHMENT P		
		Form of Interconnection Construction Service Agreement
	1.0	Parties
	2.0	Authority
	3.0	Customer Facility
	4.0	Effective Date and Term
	4.1	Effective Date
	4.2	Term
	4.3	Survival
	5.0	Construction Responsibility
	6.0	[Reserved.]
	7.0	Scope of Work
	8.0	Schedule of Work
	9.0	[Reserved.]
	10.0	Notices
	11.0	Waiver
	12.0	Amendment
	13.0	Incorporation Of Other Documents
	14.0	Addendum of Interconnection Customer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status

- 15.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service
- 16.0 Addendum of Interconnection Requirements for a Wind Generation Facility
- 17.0 Infrastructure Security of Electric System Equipment and Operations and Control Hardware and Software is Essential to Ensure Day-to-Day Reliability and Operational Security

ATTACHMENT P - APPENDIX 1 – DEFINITIONS

ATTACHMENT P - APPENDIX 2 – STANDARD CONSTRUCTION TERMS AND CONDITIONS

Preamble

1 Facilitation by Transmission Provider

2 Construction Obligations

- 2.1 Interconnection Customer Obligations
- 2.2 Transmission Owner Interconnection Facilities and Merchant Network Upgrades
 - 2.2A Scope of Applicable Technical Requirements and Standards
- 2.3 Construction By Interconnection Customer
- 2.4 Tax Liability
- 2.5 Safety
- 2.6 Construction-Related Access Rights
- 2.7 Coordination Among Constructing Parties

3 Schedule of Work

- 3.1 Construction by Interconnection Customer
- 3.2 Construction by Interconnected Transmission Owner
 - 3.2.1 Standard Option
 - 3.2.2 Negotiated Contract Option
 - 3.2.3 Option to Build
- 3.3 Revisions to Schedule of Work
- 3.4 Suspension
 - 3.4.1 Costs
 - 3.4.2 Duration of Suspension
- 3.5 Right to Complete Transmission Owner Interconnection Facilities
- 3.6 Suspension of Work Upon Default
- 3.7 Construction Reports
- 3.8 Inspection and Testing of Completed Facilities
- 3.9 Energization of Completed Facilities
- 3.10 Interconnected Transmission Owner’s Acceptance of Facilities Constructed by Interconnection Customer

4 Transmission Outages

- 4.1 Outages; Coordination

5 Land Rights; Transfer of Title

- 5.1 Grant of Easements and Other Land Rights
- 5.2 Construction of Facilities on Interconnection Customer Property
- 5.3 Third Parties
- 5.4 Documentation
- 5.5 Transfer of Title to Certain Facilities Constructed By

	Interconnection Customer
5.6	Liens
6	Warranties
6.1	Interconnection Customer Warranty
6.2	Manufacturer Warranties
7	[Reserved.]
8	[Reserved.]
9	Security, Billing And Payments
9.1	Adjustments to Security
9.2	Invoice
9.3	Final Invoice
9.4	Disputes
9.5	Interest
9.6	No Waiver
10	Assignment
10.1	Assignment with Prior Consent
10.2	Assignment Without Prior Consent
10.3	Successors and Assigns
11	Insurance
11.1	Required Coverages For Generation Resources Of More Than 20 Megawatts and Merchant Transmission Facilities
11.1A	Required Coverages For Generation Resources of 20 Megawatts Or Less
11.2	Additional Insureds
11.3	Other Required Terms
11.3A	No Limitation of Liability
11.4	Self-Insurance
11.5	Notices; Certificates of Insurance
11.6	Subcontractor Insurance
11.7	Reporting Incidents
12	Indemnity
12.1	Indemnity
12.2	Indemnity Procedures
12.3	Indemnified Person
12.4	Amount Owing
12.5	Limitation on Damages
12.6	Limitation of Liability in Event of Breach
12.7	Limited Liability in Emergency Conditions
13	Breach, Cure And Default
13.1	Breach
13.2	Notice of Breach
13.3	Cure and Default
13.3.1	Cure of Breach
13.4	Right to Compel Performance
13.5	Remedies Cumulative
14	Termination

- 14.1 Termination
- 14.2 [Reserved.]
- 14.3 Cancellation By Interconnection Customer
- 14.4 Survival of Rights
- 15 Force Majeure**
 - 15.1 Notice
 - 15.2 Duration of Force Majeure
 - 15.3 Obligation to Make Payments
 - 15.4 Definition of Force Majeure
- 16 Subcontractors**
 - 16.1 Use of Subcontractors
 - 16.2 Responsibility of Principal
 - 16.3 Indemnification by Subcontractors
 - 16.4 Subcontractors Not Beneficiaries
- 17 Confidentiality**
 - 17.1 Term
 - 17.2 Scope
 - 17.3 Release of Confidential Information
 - 17.4 Rights
 - 17.5 No Warranties
 - 17.6 Standard of Care
 - 17.7 Order of Disclosure
 - 17.8 Termination of Construction Service Agreement
 - 17.9 Remedies
 - 17.10 Disclosure to FERC or its Staff
 - 17.11 No Construction Party Shall Disclose Confidential Information of Another Construction Party 17.12 Information that is Public Domain
 - 17.13 Return or Destruction of Confidential Information
- 18 Information Access And Audit Rights**
 - 18.1 Information Access
 - 18.2 Reporting of Non-Force Majeure Events
 - 18.3 Audit Rights
- 19 Disputes**
 - 19.1 Submission
 - 19.2 Rights Under The Federal Power Act
 - 19.3 Equitable Remedies
- 20 Notices**
 - 20.1 General
 - 20.2 Operational Contacts
- 21 Miscellaneous**
 - 21.1 Regulatory Filing
 - 21.2 Waiver
 - 21.3 Amendments and Rights under the Federal Power Act
 - 21.4 Binding Effect
 - 21.5 Regulatory Requirements
- 22 Representations and Warranties**

22.1 General

ATTACHMENT P - SCHEDULE A

Site Plan

ATTACHMENT P - SCHEDULE B

Single-Line Diagram of Interconnection Facilities

ATTACHMENT P - SCHEDULE C

**Transmission Owner Interconnection Facilities to be Built by Interconnected
Transmission Owner**

ATTACHMENT P - SCHEDULE D

**Transmission Owner Interconnection Facilities to be Built by Interconnection
Customer Pursuant to Option to Build**

ATTACHMENT P - SCHEDULE E

Merchant Network Upgrades to be Built by Interconnected Transmission Owner

ATTACHMENT P - SCHEDULE F

**Merchant Network Upgrades to be Built by Interconnection Customer
Pursuant to Option to Build**

ATTACHMENT P - SCHEDULE G

Customer Interconnection Facilities

ATTACHMENT P - SCHEDULE H

Negotiated Contract Option Terms

ATTACHMENT P - SCHEDULE I

Scope of Work

ATTACHMENT P - SCHEDULE J

Schedule of Work

ATTACHMENT P - SCHEDULE K

Applicable Technical Requirements and Standards

ATTACHMENT P - SCHEDULE L

**Interconnection Customer's Agreement to Confirm with IRS Safe Harbor
Provisions For Non-Taxable Status**

ATTACHMENT P - SCHEDULE M

Schedule of Non-Standard Terms and Conditions

ATTACHMENT P - SCHEDULE N

Interconnection Requirements for a Wind Generation Facility

ATTACHMENT Q

PJM Credit Policy

ATTACHMENT R

**Lost Revenues Of PJM Transmission Owners And Distribution of Revenues
Remitted By MISO, SECA Rates to Collect PJM Transmission Owner Lost
Revenues Under Attachment X, And Revenues From PJM Existing Transactions**

ATTACHMENT S

Form of Transmission Interconnection Feasibility Study Agreement

ATTACHMENT T

Identification of Merchant Transmission Facilities

ATTACHMENT U

Independent Transmission Companies

ATTACHMENT V

	Form of ITC Agreement
ATTACHMENT W	COMMONWEALTH EDISON COMPANY
ATTACHMENT X	Seams Elimination Cost Assignment Charges
	NOTICE OF ADOPTION OF NERC TRANSMISSION LOADING RELIEF PROCEDURES
	NOTICE OF ADOPTION OF LOCAL TRANSMISSION LOADING RELIEF PROCEDURES
	SCHEDULE OF PARTIES ADOPTING LOCAL TRANSMISSION LOADING RELIEF PROCEDURES
ATTACHMENT Y	Forms of Screens Process Interconnection Request (For Generation Facilities of 2 MW or less)
ATTACHMENT Z	Certification Codes and Standards
ATTACHMENT AA	Certification of Small Generator Equipment Packages
ATTACHMENT BB	Form of Certified Inverter-Based Generating Facility No Larger Than 10 kW Interconnection Service Agreement
ATTACHMENT CC	Form of Certificate of Completion (Small Generating Inverter Facility No Larger Than 10 kW)
ATTACHMENT DD	Reliability Pricing Model
ATTACHMENT EE	Form of Upgrade Request
ATTACHMENT FF	<i>[Reserved]</i>
ATTACHMENT GG	Form of Upgrade Construction Service Agreement
	Article 1 – Definitions And Other Documents
	1.0 Defined Terms
	1.1 Incorporation of Other Documents
	Article 2 – Responsibility for Direct Assignment Facilities or Customer-Funded Upgrades
	2.0 New Service Customer Financial Responsibilities
	2.1 Obligation to Provide Security
	2.2 Failure to Provide Security
	2.3 Costs
	2.4 Transmission Owner Responsibilities
	Article 3 – Rights To Transmission Service
	3.0 No Transmission Service
	Article 4 – Early Termination
	4.0 Termination by New Service Customer

Article 5 – Rights

- 5.0 Rights
- 5.1 Amount of Rights Granted
- 5.2 Availability of Rights Granted
- 5.3 Credits

Article 6 – Miscellaneous

- 6.0 Notices
- 6.1 Waiver
- 6.2 Amendment
- 6.3 No Partnership
- 6.4 Counterparts

ATTACHMENT GG - APPENDIX I –

**SCOPE AND SCHEDULE OF WORK FOR DIRECT ASSIGNMENT
FACILITIES OR CUSTOMER-FUNDED UPGRADES TO BE BUILT BY
TRANSMISSION OWNER**

ATTACHMENT GG - APPENDIX II - DEFINITIONS

- 1 Definitions
 - 1.1 Affiliate
 - 1.2 Applicable Laws and Regulations
 - 1.3 Applicable Regional Reliability Council
 - 1.4 Applicable Standards
 - 1.5 Breach
 - 1.6 Breaching Party
 - 1.7 Cancellation Costs
 - 1.8 Commission
 - 1.9 Confidential Information
 - 1.10 Constructing Entity
 - 1.11 Control Area
 - 1.12 Costs
 - 1.13 Default
 - 1.14 Delivering Party
 - 1.15 Emergency Condition
 - 1.16 Environmental Laws
 - 1.17 Facilities Study
 - 1.18 Federal Power Act
 - 1.19 FERC
 - 1.20 Firm Point-To-Point
 - 1.21 Force Majeure
 - 1.22 Good Utility Practice
 - 1.23 Governmental Authority
 - 1.24 Hazardous Substances
 - 1.25 Incidental Expenses
 - 1.26 Local Upgrades
 - 1.27 Long-Term Firm Point-To-Point Transmission Service
 - 1.28 MAAC
 - 1.29 MAAC Control Zone

- 1.30 NERC
- 1.31 Network Upgrades
- 1.32 Office of the Interconnection
- 1.33 Operating Agreement of the PJM Interconnection, L.L.C. or Operating Agreement
- 1.34 Part I
- 1.35 Part II
- 1.36 Part III
- 1.37 Part IV
- 1.38 Part VI
- 1.39 PJM Interchange Energy Market
- 1.40 PJM Manuals
- 1.41 PJM Region
- 1.42 PJM West Region
- 1.43 Point(s) of Delivery
- 1.44 Point(s) of Receipt
- 1.45 Project Financing
- 1.46 Project Finance Entity
- 1.47 Reasonable Efforts
- 1.48 Receiving Party
- 1.49 Regional Transmission Expansion Plan
- 1.50 Schedule and Scope of Work
- 1.51 Security
- 1.52 Service Agreement
- 1.53 State
- 1.54 Transmission System
- 1.55 VACAR

ATTACHMENT GG - APPENDIX III – GENERAL TERMS AND CONDITIONS

- 1.0 Effective Date and Term
 - 1.1 Effective Date
 - 1.2 Term
 - 1.3 Survival
- 2.0 Facilitation by Transmission Provider
- 3.0 Construction Obligations
 - 3.1 Direct Assignment Facilities or Customer-Funded Upgrades
 - 3.2 Scope of Applicable Technical Requirements and Standards
- 4.0 Tax Liability
 - 4.1 New Service Customer Payments Taxable
 - 4.2 Income Tax Gross-Up
 - 4.3 Private Letter Ruling
 - 4.4 Refund
 - 4.5 Contests
 - 4.6 Taxes Other Than Income Taxes
 - 4.7 Tax Status
- 5.0 Safety
 - 5.1 General

- 5.2 Environmental Releases
- 6.0 Schedule Of Work
 - 6.1 Standard Option
 - 6.2 Option to Build
 - 6.3 Revisions to Schedule and Scope of Work
 - 6.4 Suspension
- 7.0 Suspension of Work Upon Default
 - 7.1 Notification and Correction of Defects
- 8.0 Transmission Outages
 - 8.1 Outages; Coordination
- 9.0 Security, Billing and Payments
 - 9.1 Adjustments to Security
 - 9.2 Invoice
 - 9.3 Final Invoice
 - 9.4 Disputes
 - 9.5 Interest
 - 9.6 No Waiver
- 10.0 Assignment
 - 10.1 Assignment with Prior Consent
 - 10.2 Assignment Without Prior Consent
 - 10.3 Successors and Assigns
- 11.0 Insurance
 - 11.1 Required Coverages
 - 11.2 Additional Insureds
 - 11.3 Other Required Terms
 - 11.4 No Limitation of Liability
 - 11.5 Self-Insurance
 - 11.6 Notices: Certificates of Insurance
 - 11.7 Subcontractor Insurance
 - 11.8 Reporting Incidents
- 12.0 Indemnity
 - 12.1 Indemnity
 - 12.2 Indemnity Procedures
 - 12.3 Indemnified Person
 - 12.4 Amount Owing
 - 12.5 Limitation on Damages
 - 12.6 Limitation of Liability in Event of Breach
 - 12.7 Limited Liability in Emergency Conditions
- 13.0 Breach, Cure And Default
 - 13.1 Breach
 - 13.2 Notice of Breach
 - 13.3 Cure and Default
 - 13.4 Right to Compel Performance
 - 13.5 Remedies Cumulative
- 14.0 Termination
 - 14.1 Termination

- 14.2 Cancellation By New Service Customer
- 14.3 Survival of Rights
- 14.4 Filing at FERC
- 15.0 Force Majeure
 - 15.1 Notice
 - 15.2 Duration of Force Majeure
 - 15.3 Obligation to Make Payments
- 16.0 Confidentiality
 - 16.1 Term
 - 16.2 Scope
 - 16.3 Release of Confidential Information
 - 16.4 Rights
 - 16.5 No Warranties
 - 16.6 Standard of Care
 - 16.7 Order of Disclosure
 - 16.8 Termination of Upgrade Construction Service Agreement
 - 16.9 Remedies
 - 16.10 Disclosure to FERC or its Staff
 - 16.11 No Party Shall Disclose Confidential Information of Party 16.12
Information that is Public Domain
 - 16.13 Return or Destruction of Confidential Information
- 17.0 Information Access And Audit Rights
 - 17.1 Information Access
 - 17.2 Reporting of Non-Force Majeure Events
 - 17.3 Audit Rights
 - 17.4 Waiver
 - 17.5 Amendments and Rights under the Federal Power Act
 - 17.6 Regulatory Requirements
- 18.0 Representation and Warranties
 - 18.1 General
- 19.0 Inspection and Testing of Completed Facilities
 - 19.1 Coordination
 - 19.2 Inspection and Testing
 - 19.3 Review of Inspection and Testing by Transmission Owner
 - 19.4 Notification and Correction of Defects
 - 19.5 Notification of Results
- 20.0 Energization of Completed Facilities
- 21.0 Transmission Owner's Acceptance of Facilities Constructed
by New Service Customer
- 22.0 Transfer of Title to Certain Facilities Constructed By New Service Customer
- 23.0 Liens

**ATTACHMENT HH – RATES, TERMS, AND CONDITIONS OF SERVICE FOR
PJMSETTLEMENT, INC.**

ATTACHMENT II – MTEP PROJECT COST RECOVERY FOR ATSI ZONE

ATTACHMENT JJ – MTEP PROJECT COST RECOVERY FOR DEOK ZONE

ATTACHMENT KK - FORM OF DESIGNATED ENTITY AGREEMENT

ATTACHMENT LL - FORM OF INTERCONNECTION COORDINATION AGREEMENT

ATTACHMENT MM – FORM OF PSEUDO-TIE AGREEMENT – WITH NATIVE BA AS PARTY

ATTACHMENT MM-1 – FORM OF SYSTEM MODIFICATION COST REIMBURSEMENT AGREEMENT – PSEUDO-TIE INTO PJM

ATTACHMENT NN – FORM OF PSEUDO-TIE AGREEMENT WITHOUT NATIVE BA AS PARTY

ATTACHMENT OO – FORM OF DYNAMIC SCHEDULE AGREEMENT INTO THE PJM REGION

ATTACHMENT PP – FORM OF FIRM TRANSMISSION FEASIBILITY STUDY AGREEMENT

Definitions – L – M - N

Limited Demand Resource:

“Limited Demand Resource” shall have the meaning specified in the Reliability Assurance Agreement.

Limited Demand Resource Reliability Target:

“Limited Demand Resource Reliability Target” for the PJM Region or an LDA, shall mean the maximum amount of Limited Demand Resources determined by PJM to be consistent with the maintenance of reliability, stated in Unforced Capacity that shall be used to calculate the Minimum Extended Summer Demand Resource Requirement for Delivery Years through May 31, 2017 and the Limited Resource Constraint for the 2017/2018 and 2018/2019 Delivery Years for the PJM Region or such LDA. As more fully set forth in the PJM Manuals, PJM calculates the Limited Demand Resource Reliability Target by first: i) testing the effects of the ten-interruption requirement by comparing possible loads on peak days under a range of weather conditions (from the daily load forecast distributions for the Delivery Year in question) against possible generation capacity on such days under a range of conditions (using the cumulative capacity distributions employed in the Installed Reserve Margin study for the PJM Region and in the Capacity Emergency Transfer Objective study for the relevant LDAs for such Delivery Year) and, by varying the assumed amounts of DR that is committed and displaces committed generation, determines the DR penetration level at which there is a ninety percent probability that DR will not be called (based on the applicable operating reserve margin for the PJM Region and for the relevant LDAs) more than ten times over those peak days; ii) testing the six-hour duration requirement by calculating the MW difference between the highest hourly unrestricted peak load and seventh highest hourly unrestricted peak load on certain high peak load days (e.g., the annual peak, loads above the weather normalized peak, or days where load management was called) in recent years, then dividing those loads by the forecast peak for those years and averaging the result; and (iii) (for the 2016/2017 and 2017/2018 Delivery Years) testing the effects of the six-hour duration requirement by comparing possible hourly loads on peak days under a range of weather conditions (from the daily load forecast distributions for the Delivery Year in question) against possible generation capacity on such days under a range of conditions (using a Monte Carlo model of hourly capacity levels that is consistent with the capacity model employed in the Installed Reserve Margin study for the PJM Region and in the Capacity Emergency Transfer Objective study for the relevant LDAs for such Delivery Year) and, by varying the assumed amounts of DR that is committed and displaces committed generation, determines the DR penetration level at which there is a ninety percent probability that DR will not be called (based on the applicable operating reserve margin for the PJM Region and for the relevant LDAs) for more than six hours over any one or more of the tested peak days. Second, PJM adopts the lowest result from these three tests as the Limited Demand Resource Reliability Target. The Limited Demand Resource Reliability Target shall be expressed as a percentage of the forecasted peak load of the PJM Region or such LDA and is converted to Unforced Capacity by multiplying [the reliability target percentage] times [the Forecast Pool Requirement] times [the DR Factor] times [the forecasted peak load of the PJM Region or such LDA, reduced by the amount of load served under the FRR Alternative].

Limited Resource Constraint:

“Limited Resource Constraint” shall mean, for the 2017/2018 Delivery Year and for FRR Capacity Plans the 2017/2018 and Delivery Years, for the PJM Region or each LDA for which the Office of the Interconnection is required under Tariff, Attachment DD, section 5.10(a) to establish a separate VRR Curve for a Delivery Year, a limit on the total amount of Unforced Capacity that can be committed as Limited Demand Resources for the 2017/2018 Delivery Year in the PJM Region or in such LDA, calculated as the Limited Demand Resource Reliability Target for the PJM Region or such LDA, respectively, minus the Short Term Resource Procurement Target for the PJM Region or such LDA, respectively.

Limited Resource Price Decrement:

“Limited Resource Price Decrement” shall mean, for the 2017/2018 Delivery Year, a difference between the clearing price for Limited Demand Resources and the clearing price for Extended Summer Demand Resources and Annual Resources, representing the cost to procure additional Extended Summer Demand Resources or Annual Resources out of merit order when the Limited Resource Constraint is binding.

List of Approved Contractors:

“List of Approved Contractors” shall mean a list developed by each Transmission Owner and published in a PJM Manual of (a) contractors that the Transmission Owner considers to be qualified to install or construct new facilities and/or upgrades or modifications to existing facilities on the Transmission Owner’s system, provided that such contractors may include, but need not be limited to, contractors that, in addition to providing construction services, also provide design and/or other construction-related services, and (b) manufacturers or vendors of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) whose products the Transmission Owner considers acceptable for installation and use on its system.

Load Management:

“Load Management” shall mean a Demand Resource (“DR”) as defined in the Reliability Assurance Agreement.

Load Management Event:

“Load Management Event” shall mean a) a single temporally contiguous dispatch of Demand Resources in a Compliance Aggregation Area during an Operating Day, or b) multiple dispatches of Demand Resources in a Compliance Aggregation Area during an Operating Day that are temporally contiguous.

Load Ratio Share:

“Load Ratio Share” shall mean the ratio of a Transmission Customer’s Network Load to the Transmission Provider’s total load.

Load Reduction Event:

“Load Reduction Event” shall mean a reduction in demand by a Member or Special Member for the purpose of participating in the PJM Interchange Energy Market.

Load Serving Entity (LSE):

“Load Serving Entity” or “LSE” shall have the meaning specified in the Reliability Assurance Agreement.

Load Shedding:

“Load Shedding” shall mean the systematic reduction of system demand by temporarily decreasing load in response to transmission system or area capacity shortages, system instability, or voltage control considerations under Tariff, Part II or Part III.

Local Upgrades:

“Local Upgrades” shall mean modifications or additions of facilities to abate any local thermal loading, voltage, short circuit, stability or similar engineering problem caused by the interconnection and delivery of generation to the Transmission System. Local Upgrades shall include:

(i) Direct Connection Local Upgrades which are Local Upgrades that only serve the Customer Interconnection Facility and have no impact or potential impact on the Transmission System until the final tie-in is complete; and

(ii) Non-Direct Connection Local Upgrades which are parallel flow Local Upgrades that are not Direct Connection Local Upgrades.

Location:

“Location” as used in the Economic Load Response rules shall mean an end-use customer site as defined by the relevant electric distribution company account number.

LOC Deviation:

“LOC Deviation,” shall mean, for units other than wind units, the LOC Deviation shall equal the desired megawatt amount for the resource determined according to the point on the Final Offer curve corresponding to the *Real-time Settlement Interval* real-time Locational Marginal Price at the resource’s bus and adjusted for any Regulation or Tier 2 Synchronized Reserve assignments and limited to the lesser of the unit’s Economic Maximum or the unit’s Generation Resource Maximum Output, minus the actual output of the unit. For wind units, the LOC Deviation shall

mean the deviation of the generating unit's output equal to the lesser of the PJM forecasted output for the unit or the desired megawatt amount for the resource determined according to the point on the Final Offer curve corresponding to the *Real-time Settlement Interval* integrated real-time Locational Marginal Price at the resource's bus, and shall be limited to the lesser of the unit's Economic Maximum or the unit's Generation Resource Maximum Output, minus the actual output of the unit.

Locational Deliverability Area (LDA):

“Locational Deliverability Area” or “LDA” shall mean a geographic area within the PJM Region that has limited transmission capability to import capacity to satisfy such area's reliability requirement, as determined by the Office of the Interconnection in connection with preparation of the Regional Transmission Expansion Plan, and as specified in Reliability Assurance Agreement, Schedule 10.1.

Locational Deliverability Area Reliability Requirement:

“Locational Deliverability Area Reliability Requirement” shall mean the projected internal capacity in the Locational Deliverability Area plus the Capacity Emergency Transfer Objective for the Delivery Year, as determined by the Office of the Interconnection in connection with preparation of the Regional Transmission Expansion Plan, less the minimum internal resources required for all FRR Entities in such Locational Deliverability Area.

Locational Price Adder:

“Locational Price Adder” shall mean an addition to the marginal value of Unforced Capacity within an LDA as necessary to reflect the price of Capacity Resources required to relieve applicable binding locational constraints.

Locational Reliability Charge:

“Locational Reliability Charge” shall have the meaning specified in the Reliability Assurance Agreement.

Locational UCAP:

“Locational UCAP” shall mean unforced capacity that a Member with available uncommitted capacity sells in a bilateral transaction to a Member that previously committed capacity through an RPM Auction but now requires replacement capacity to fulfill its RPM Auction commitment. The Locational UCAP Seller retains responsibility for performance of the resource providing such replacement capacity.

Locational UCAP Seller:

“Locational UCAP Seller” shall mean a Member that sells Locational UCAP.

Long-lead Project:

“Long-lead Project” shall have the same meaning provided in the Operating Agreement.

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

“Long-Term Firm Point-To-Point Transmission Service” shall mean firm Point-To-Point Transmission Service under Tariff, Part II with a term of one year or more.

Loss Price:

“Loss Price” shall mean the loss component of the Locational Marginal Price, which is the effect on transmission loss costs (whether positive or negative) associated with increasing the output of a generation resource or decreasing the consumption by a Demand Resource based on the effect of increased generation from or consumption by the resource on transmission losses, calculated as specified in Operating Agreement, Schedule 1, section 2, and the parallel provisions of Tariff, Attachment K-Appendix.

Maintenance Adder:

“Maintenance Adder” shall mean an adder that may be included to account for variable operation and maintenance expenses in a Market Seller’s Fuel Cost Policy. The Maintenance Adder is calculated in accordance with the applicable provisions of PJM Manual 15, and may only include expenses incurred as a result of electric production.

Manual Load Dump Action:

“Manual Load Dump Action” shall mean an Operating Instruction, as defined by NERC, from PJM to shed firm load when the PJM Region cannot provide adequate capacity to meet the PJM Region’s load and tie schedules, or to alleviate critically overloaded transmission lines or other equipment.

Manual Load Dump Warning:

“Manual Load Dump Warning” shall mean a notification from PJM to warn Members of an increasingly critical condition of present operations that may require manually shedding load.

Market Monitor:

“Market Monitor” means the head of the Market Monitoring Unit.

Market Monitoring Unit or MMU:

“Market Monitoring Unit” or “MMU” means the organization that is responsible for implementing this Plan, including the Market Monitor.

Market Monitoring Unit Advisory Committee or MMU Advisory Committee:

“Market Monitoring Unit Advisory Committee” or “MMU Advisory Committee” shall mean the committee established under Tariff, Attachment M, section III.H.

Market Operations Center:

“Market Operations Center” shall mean the equipment, facilities and personnel used by or on behalf of a Market Participant to communicate and coordinate with the Office of the Interconnection in connection with transactions in the PJM Interchange Energy Market or the operation of the PJM Region.

Market Participant:

“Market Participant” shall mean a Market Buyer, a Market Seller, an Economic Load Response Participant, or all three, except when such term is used in Attachment M of the Tariff, in which case Market Participant shall mean an entity that generates, transmits, distributes, purchases, or sells electricity, ancillary services, or any other product or service provided under the PJM Tariff or Operating Agreement within, into, out of, or through the PJM Region, but it shall not include an Authorized Government Agency that consumes energy for its own use but does not purchase or sell energy at wholesale.

Market Participant Energy Injection:

“Market Participant Energy Injection” shall mean transactions in the Day-ahead Energy Market and Real-time Energy Market, including but not limited to Day-ahead generation schedules, real-time generation output, Increment Offers, internal bilateral transactions and import transactions, as further described in the PJM Manuals.

Market Participant Energy Withdrawal:

“Market Participant Energy Withdrawal” shall mean transactions in the Day-ahead Energy Market and Real-time Energy Market, including but not limited to Demand Bids, Decrement Bids, real-time load (net of Behind The Meter Generation expected to be operating, but not to be less than zero), internal bilateral transactions and Export Transactions, as further described in the PJM Manuals.

Market Seller Offer Cap:

“Market Seller Offer Cap” shall mean a maximum offer price applicable to certain Market Sellers under certain conditions, as determined in accordance with Tariff, Attachment DD, section 6 and Tariff, Attachment M-Appendix, section II.E.

Market Violation:

“Market Violation” shall mean a tariff violation, violation of a Commission-approved order, rule or regulation, market manipulation, or inappropriate dispatch that creates substantial concerns regarding unnecessary market inefficiencies, as defined in 18 C.F.R. § 35.28(b)(8).

Material Modification:

“Material Modification” shall mean any modification to an Interconnection Request that has a material adverse effect on the cost or timing of Interconnection Studies related to, or any Network Upgrades or Local Upgrades needed to accommodate, any Interconnection Request with a later Queue Position.

Maximum Daily Starts:

“Maximum Daily Starts” shall mean the maximum number of times that a generating unit can be started in an Operating Day under normal operating conditions.

Maximum Emergency:

“Maximum Emergency” shall mean the designation of all or part of the output of a generating unit for which the designated output levels may require extraordinary procedures and therefore are available to the Office of the Interconnection only when the Office of the Interconnection declares a Maximum Generation Emergency and requests generation designated as Maximum Emergency to run. The Office of the Interconnection shall post on the PJM website the aggregate amount of megawatts that are classified as Maximum Emergency.

Maximum Facility Output:

“Maximum Facility Output” shall mean the maximum (not nominal) net electrical power output in megawatts, specified in the Interconnection Service Agreement, after supply of any parasitic or host facility loads, that a Generation Interconnection Customer’s Customer Facility is expected to produce, provided that the specified Maximum Facility Output shall not exceed the output of the proposed Customer Facility that Transmission Provider utilized in the System Impact Study.

Maximum Generation Emergency:

“Maximum Generation Emergency” shall mean an Emergency declared by the Office of the Interconnection to address either a generation or transmission emergency in which the Office of the Interconnection anticipates requesting one or more Generation Capacity Resources, or Non-Retail Behind The Meter Generation resources to operate at its maximum net or gross electrical power output, subject to the equipment stress limits for such Generation Capacity Resource or Non-Retail Behind The Meter resource in order to manage, alleviate, or end the Emergency.

Maximum Generation Emergency Alert:

“Maximum Generation Emergency Alert” shall mean an alert issued by the Office of the Interconnection to notify PJM Members, Transmission Owners, resource owners and operators, customers, and regulators that a Maximum Generation Emergency may be declared, for any Operating Day in either, as applicable, the Day-ahead Energy Market or the Real-time Energy Market, for all or any part of such Operating Day.

Maximum Run Time:

“Maximum Run Time” shall mean the maximum number of hours a generating unit can run over the course of an Operating Day, as measured by PJM’s State Estimator.

Maximum Weekly Starts:

“Maximum Weekly Starts” shall mean the maximum number of times that a generating unit can be started in one week, defined as the 168 hour period starting Monday 0001 hour, under normal operating conditions.

Member:

“Member” shall have the meaning provided in the Operating Agreement.

Merchant A.C. Transmission Facilities:

“Merchant A.C. Transmission Facility” shall mean Merchant Transmission Facilities that are alternating current (A.C.) transmission facilities, other than those that are Controllable A.C. Merchant Transmission Facilities.

Merchant D.C. Transmission Facilities:

“Merchant D.C. Transmission Facilities” shall mean direct current (D.C.) transmission facilities that are interconnected with the Transmission System pursuant to Tariff, Part IV and Part VI.

Merchant Network Upgrades:

“Merchant Network Upgrades” shall mean additions to, or modifications or replacements of, physical facilities of the Interconnected Transmission Owner that, on the date of the pertinent Transmission Interconnection Customer’s Upgrade Request, are part of the Transmission System or are included in the Regional Transmission Expansion Plan.

Merchant Transmission Facilities:

“Merchant Transmission Facilities” shall mean A.C. or D.C. transmission facilities that are interconnected with or added to the Transmission System pursuant to Tariff, Part IV and Part VI and that are so identified on Attachment T to the Tariff, provided, however, that Merchant Transmission Facilities shall not include (i) any Customer Interconnection Facilities, (ii) any physical facilities of the Transmission System that were in existence on or before March 20,

2003 ; (iii) any expansions or enhancements of the Transmission System that are not identified as Merchant Transmission Facilities in the Regional Transmission Expansion Plan and Attachment T to the Tariff, or (iv) any transmission facilities that are included in the rate base of a public utility and on which a regulated return is earned.

Merchant Transmission Provider:

“Merchant Transmission Provider” shall mean an Interconnection Customer that (1) owns, controls, or controls the rights to use the transmission capability of, Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that connect the Transmission System with another control area, (2) has elected to receive Transmission Injection Rights and Transmission Withdrawal Rights associated with such facility pursuant to Section 36 of the Tariff, and (3) makes (or will make) the transmission capability of such facilities available for use by third parties under terms and conditions approved by the Commission and stated in the Tariff, consistent with Tariff, section 38.

Metering Equipment:

“Metering Equipment” shall mean all metering equipment installed at the metering points designated in the appropriate appendix to an Interconnection Service Agreement.

Minimum Annual Resource Requirement:

“Minimum Annual Resource Requirement” shall mean, for Delivery Years through May 31, 2017, the minimum amount of capacity that PJM will seek to procure from Annual Resources for the PJM Region and for each Locational Deliverability Area for which the Office of the Interconnection is required under Tariff, Attachment DD, section 5.10(a) to establish a separate VRR Curve for such Delivery Year. For the PJM Region, the Minimum Annual Resource Requirement shall be equal to the RTO Reliability Requirement minus [the Sub-Annual Resource Reliability Target for the RTO in Unforced Capacity]. For an LDA, the Minimum Annual Resource Requirement shall be equal to the LDA Reliability Requirement minus [the LDA CETL] minus [the Sub-Annual Resource Reliability Target for such LDA in Unforced Capacity]. The LDA CETL may be adjusted pro rata for the amount of load served under the FRR Alternative.

Minimum Down Time:

For all generating units that are not combined cycle units, “Minimum Down Time” shall mean the minimum number of hours under normal operating conditions between unit shutdown and unit startup, calculated as the shortest time difference between the unit’s generator breaker opening and after the unit’s generator breaker closure, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero. For combined cycle units, “Minimum Down Time” shall mean the minimum number of hours between the last generator breaker opening and after first combustion turbine generator breaker closure, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero.

Minimum Extended Summer Resource Requirement:

“Minimum Extended Summer Resource Requirement” shall mean, for Delivery Years through May 31, 2017, the minimum amount of capacity that PJM will seek to procure from Extended Summer Demand Resources and Annual Resources for the PJM Region and for each Locational Deliverability Area for which the Office of the Interconnection is required under Tariff, Attachment DD, section 5.10(a) to establish a separate VRR Curve for such Delivery Year. For the PJM Region, the Minimum Extended Summer Resource Requirement shall be equal to the RTO Reliability Requirement minus [the Limited Demand Resource Reliability Target for the PJM Region in Unforced Capacity]. For an LDA, the Minimum Extended Summer Resource Requirement shall be equal to the LDA Reliability Requirement minus [the LDA CETL] minus [the Limited Demand Resource Reliability Target for such LDA in Unforced Capacity]. The LDA CETL may be adjusted pro rata for the amount of load served under the FRR Alternative.

Minimum Generation Emergency:

“Minimum Generation Emergency” shall mean an Emergency declared by the Office of the Interconnection in which the Office of the Interconnection anticipates requesting one or more generating resources to operate at or below Normal Minimum Generation, in order to manage, alleviate, or end the Emergency.

Minimum Participation Requirements:

“Minimum Participation Requirements” shall mean a set of minimum training, risk management, communication and capital or collateral requirements required for Participants in the PJM Markets, as set forth herein and in the Form of Annual Certification set forth as Tariff, Attachment Q, Appendix 1. Participants transacting in FTRs in certain circumstances will be required to demonstrate additional risk management procedures and controls as further set forth in the Annual Certification found in Tariff, Attachment Q, Appendix 1.

Minimum Run Time:

For all generating units that are not combined cycle units, “Minimum Run Time” shall mean the minimum number of hours a unit must run, in real-time operations, from the time after generator breaker closure, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero, to the time of generator breaker opening, as measured by PJM's State Estimator. For combined cycle units, “Minimum Run Time” shall mean the time period after the first combustion turbine generator breaker closure, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero, and the last generator breaker opening as measured by PJM's State Estimator.

MISO:

“MISO” shall mean the Midcontinent Independent System Operator, Inc. or any successor thereto.

Multi-Driver Project:

“Multi-Driver Project” shall have the same meaning provided in the Operating Agreement.

Native Load Customers:

“Native Load Customers” shall mean the wholesale and retail power customers of a Transmission Owner on whose behalf the Transmission Owner, by statute, franchise, regulatory requirement, or contract, has undertaken an obligation to construct and operate the Transmission Owner’s system to meet the reliable electric needs of such customers.

NERC:

“NERC” shall mean the North American Electric Reliability Corporation or any successor thereto.

NERC Interchange Distribution Calculator:

“NERC Interchange Distribution Calculator” shall mean the NERC mechanism that is in effect and being used to calculate the distribution of energy, over specific transmission interfaces, from energy transactions.

Net Benefits Test:

“Net Benefits Test” shall mean a calculation to determine whether the benefits of a reduction in price resulting from the dispatch of Economic Load Response exceeds the cost to other loads resulting from the billing unit effects of the load reduction, as specified in Operating Agreement, Schedule 1, section 3.3A.4 and the parallel provisions of Tariff, Attachment K-Appendix, section 3.3A.4.

Net Cost of New Entry:

“Net Cost of New Entry” shall mean the Cost of New Entry minus the Net Energy and Ancillary Service Revenue Offset.

Net Obligation:

“Net Obligation” shall mean the amount owed to PJMSettlement and PJM for purchases from the PJM Markets, Transmission Service, (under Tariff, Parts Part II and III , and other services pursuant to the Agreements, after applying a deduction for amounts owed to a Participant by PJMSettlement as it pertains to monthly market activity and services. Should other markets be formed such that Participants may incur future Obligations in those markets, then the aggregate amount of those Obligations will also be added to the Net Obligation.

Net Sell Position:

“Net Sell Position” shall mean the amount of Net Obligation when Net Obligation is negative.

Network Customer:

“Network Customer” shall mean an entity receiving transmission service pursuant to the terms of the Transmission Provider’s Network Integration Transmission Service under Tariff, Part III.

Network External Designated Transmission Service:

“Network External Designated Transmission Service” shall have the meaning set forth in Article I of the Reliability Assurance Agreement.

Network Integration Transmission Service:

“Network Integration Transmission Service” shall mean the transmission service provided under Tariff, Part III.

Network Load:

“Network Load” shall mean the load that a Network Customer designates for Network Integration Transmission Service under Tariff, Part III. The Network Customer’s Network Load shall include all load (including losses) served by the output of any Network Resources designated by the Network Customer. A Network Customer may elect to designate less than its total load as Network Load but may not designate only part of the load at a discrete Point of Delivery. Where an Eligible Customer has elected not to designate a particular load at discrete points of delivery as Network Load, the Eligible Customer is responsible for making separate arrangements under Tariff, Part II for any Point-To-Point Transmission Service that may be necessary for such non-designated load.

Network Operating Agreement:

“Network Operating Agreement” shall mean an executed agreement that contains the terms and conditions under which the Network Customer shall operate its facilities and the technical and operational matters associated with the implementation of Network Integration Transmission Service under Tariff, Part III.

Network Operating Committee:

“Network Operating Committee” shall mean a group made up of representatives from the Network Customer(s) and the Transmission Provider established to coordinate operating criteria and other technical considerations required for implementation of Network Integration Transmission Service under Tariff, Part III.

Network Resource:

“Network Resource” shall mean any designated generating resource owned, purchased, or leased by a Network Customer under the Network Integration Transmission Service Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer’s Network Load on a non-interruptible basis, except for purposes of fulfilling obligations under a reserve sharing program.

Network Service User:

“Network Service User” shall mean an entity using Network Transmission Service.

Network Transmission Service:

“Network Transmission Service” shall mean transmission service provided pursuant to the rates, terms and conditions set forth in Tariff, Part III, or transmission service comparable to such service that is provided to a Load Serving Entity that is also a Transmission Owner.

Network Upgrades:

“Network Upgrades” shall mean modifications or additions to transmission-related facilities that are integrated with and support the Transmission Provider’s overall Transmission System for the general benefit of all users of such Transmission System. Network Upgrades shall include:

(i) **Direct Connection Network Upgrades** which are Network Upgrades that only serve the Customer Interconnection Facility and have no impact or potential impact on the Transmission System until the final tie-in is complete; and

(ii) **Non-Direct Connection Network Upgrades** which are parallel flow Network Upgrades that are not Direct Connection Network Upgrades.

Neutral Party:

“Neutral Party” shall have the meaning provided in Tariff, Part I, section 9.3(v).

New PJM Zone(s):

“New PJM Zone(s)” shall mean the Zone included in the Tariff, along with applicable Schedules and Attachments, for Commonwealth Edison Company, The Dayton Power and Light Company and the AEP East Operating Companies (Appalachian Power Company, Columbus Southern Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company).

New Service Customers:

“New Service Customers” shall mean all customers that submit an Interconnection Request, a Completed Application, or an Upgrade Request that is pending in the New Services Queue.

New Service Request:

“New Service Request” shall mean an Interconnection Request, a Completed Application, or an Upgrade Request.

New Services Queue:

“New Service Queue” shall mean all Interconnection Requests, Completed Applications, and Upgrade Requests that are received within each six-month period ending on April 30 and October 31 of each year shall collectively comprise a New Services Queue.

New Services Queue Closing Date:

“New Services Queue Closing Date” shall mean each April 30 and October 31 shall be the Queue Closing Date for the New Services Queue comprised of Interconnection Requests, Completed Applications, and Upgrade Requests received during the six-month period ending on such date.

New York ISO or NYISO:

“New York ISO” or “NYISO” shall mean the New York Independent System Operator, Inc. or any successor thereto.

Nodal Reference Price:

The “Nodal Reference Price” at each location shall mean the 97th percentile price differential between day-ahead and real-time prices experienced over the corresponding two-month reference period in the prior calendar year. Reference periods will be Jan-Feb, Mar-Apr, May-Jun, Jul-Aug, Sept-Oct, Nov-Dec. For any given current-year month, the reference period months will be the set of two months in the prior calendar year that include the month corresponding to the current month. For example, July and August 2003 would each use July-August 2002 as their reference period.

No-load Cost:

“No-load Cost” shall mean the hourly cost required to create the starting point of a monotonically increasing incremental offer curve for a generating unit.

Nominal Rated Capability:

“Nominal Rated Capability” shall mean the nominal maximum rated capability in megawatts of a Transmission Interconnection Customer’s Customer Facility or the nominal increase in transmission capability in megawatts of the Transmission System resulting from the interconnection or addition of a Transmission Interconnection Customer’s Customer Facility, as

determined in accordance with pertinent Applicable Standards and specified in the Interconnection Service Agreement.

Nominated Demand Resource Value:

“Nominated Demand Resource Value” shall mean the amount of load reduction that a Demand Resource commits to provide either through direct load control, firm service level or guaranteed load drop programs. For existing Demand Resources, the maximum Nominated Demand Resource Value is limited, in accordance with the PJM Manuals, to the value appropriate for the method by which the load reduction would be accomplished, at the time the Base Residual Auction or Incremental Auction is being conducted.

Nominated Energy Efficiency Value:

“Nominated Energy Efficiency Value” shall mean the amount of load reduction that an Energy Efficiency Resource commits to provide through installation of more efficient devices or equipment or implementation of more efficient processes or systems.

Non-Firm Point-To-Point Transmission Service:

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

Non-Firm Sale:

“Non-Firm Sale” shall mean an energy sale for which receipt or delivery may be interrupted for any reason or no reason, without liability on the part of either the buyer or seller.

Non-Firm Transmission Withdrawal Rights:

“No-Firm Transmission Withdrawal Rights” shall mean the rights to schedule energy withdrawals from a specified point on the Transmission System. Non-Firm Transmission Withdrawal Rights may be awarded only to a Merchant D.C. Transmission Facility that connects the Transmission System to another control area. Withdrawals scheduled using Non-Firm Transmission Withdrawal Rights have rights similar to those under Non-Firm Point-to-Point Transmission Service.

Non-Performance Charge:

“Non-Performance Charge” shall mean the charge applicable to Capacity Performance Resources as defined in Attachment DD, § 10A(e).

Nonincumbent Developer:

“Nonincumbent Developer” shall have the same meaning provided in the Operating Agreement.

Non-Regulatory Opportunity Cost:

“Non-Regulatory Opportunity Cost” shall mean the difference between (a) the forecasted cost to operate a specific generating unit when the unit only has a limited number of starts or available run hours resulting from (i) the physical equipment limitations of the unit, for up to one year, due to original equipment manufacturer recommendations or insurance carrier restrictions, (ii) a fuel supply limitation, for up to one year, resulting from an event of Catastrophic Force Majeure; and, (b) the forecasted future Locational Marginal Price at which the generating unit could run while not violating such limitations. Non-Regulatory Opportunity Cost therefore is the value associated with a specific generating unit’s lost opportunity to produce energy during a higher valued period of time occurring within the same period of time in which the unit is bound by the referenced restrictions, and is reflected in the rules set forth in PJM Manual 15. Non-Regulatory Opportunity Costs shall be limited to those resources which are specifically delineated in Schedule 2 of the Operating Agreement.

Non-Retail Behind The Meter Generation:

“Non-Retail Behind The Meter Generation” shall mean Behind the Meter Generation that is used by municipal electric systems, electric cooperatives, or electric distribution companies to serve load.

Non-Synchronized Reserve:

“Non-Synchronized Reserve” shall mean the reserve capability of non-emergency generation resources that can be converted fully into energy within ten minutes of a request from the Office of the Interconnection dispatcher, and is provided by equipment that is not electrically synchronized to the Transmission System.

Non-Synchronized Reserve Event:

“Non-Synchronized Reserve Event” shall mean a request from the Office of the Interconnection to generation resources able and assigned to provide Non-Synchronized Reserve in one or more specified Reserve Zones or Reserve Sub-zones, within ten minutes to increase the energy output by the amount of assigned Non-Synchronized Reserve capability.

Non-Variable Loads:

“Non-Variable Loads” shall have the meaning specified in Operating Agreement, Schedule 1, section 1.5A.6, and the parallel provisions of Tariff, Attachment K-Appendix.

Non-Zone Network Load:

“Non-Zone Network Load shall mean Network Load that is located outside of the PJM Region.

Normal Maximum Generation:

“Normal Maximum Generation” shall mean the highest output level of a generating resource under normal operating conditions.

Normal Minimum Generation:

“Normal Minimum Generation” shall mean the lowest output level of a generating resource under normal operating conditions.

Definitions – O – P - Q

Obligation:

“Obligation” shall mean all amounts owed to PJM Settlement for purchases from the PJM Markets, Transmission Service, (under both Tariff, Part II and Part III), and other services or obligations pursuant to the Agreements. In addition, aggregate amounts that will be owed to PJM Settlement in the future for capacity purchases within the PJM capacity markets will be added to this figure. Should other markets be formed such that Participants may incur future Obligations in those markets, then the aggregate amount of those Obligations will also be added to the Net Obligation.

Offer Data:

“Offer Data” shall mean the scheduling, operations planning, dispatch, new resource, and other data and information necessary to schedule and dispatch generation resources and Demand Resource(s) for the provision of energy and other services and the maintenance of the reliability and security of the Transmission System in the PJM Region, and specified for submission to the PJM Interchange Energy Market for such purposes by the Office of the Interconnection.

Office of the Interconnection:

“Office of the Interconnection” shall mean the employees and agents of PJM Interconnection, L.L.C. subject to the supervision and oversight of the PJM Board, acting pursuant to the Operating Agreement.

Office of the Interconnection Control Center:

“Office of the Interconnection Control Center” shall mean the equipment, facilities and personnel used by the Office of the Interconnection to coordinate and direct the operation of the PJM Region and to administer the PJM Interchange Energy Market, including facilities and equipment used to communicate and coordinate with the Market Participants in connection with transactions in the PJM Interchange Energy Market or the operation of the PJM Region.

On-Site Generators:

“On-Site Generators” shall mean generation facilities (including Behind The Meter Generation) that (i) are not Capacity Resources, (ii) are not injecting into the grid, (iii) are either synchronized or non-synchronized to the Transmission System, and (iv) can be used to reduce demand for the purpose of participating in the PJM Interchange Energy Market.

Open Access Same-Time Information System (OASIS):

“Open Access Same-Time Information System” or “OASIS” shall mean the information system and standards of conduct contained in Part 37 and Part 38 of the Commission’s regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS.

Operating Agreement of the PJM Interconnection, L.L.C. or Operating Agreement:

“Operating Agreement of the PJM Interconnection, L.L.C.” or “Operating Agreement” shall mean that agreement dated as of April 1, 1997 and as amended and restated as of June 2, 1997, including all Schedules, Exhibits, Appendices, addenda or supplements hereto, as amended from time to time thereafter, among the Members of the PJM Interconnection, L.L.C.

Operating Day:

“Operating Day” shall mean the daily 24 hour period beginning at midnight for which transactions on the PJM Interchange Energy Market are scheduled.

Operating Margin:

“Operating Margin” shall mean the incremental adjustments, measured in megawatts, required in PJM Region operations in order to accommodate, on a first contingency basis, an operating contingency in the PJM Region resulting from operations in an interconnected Control Area. Such adjustments may result in constraints causing Transmission Congestion Charges, or may result in Ancillary Services charges pursuant to the PJM Tariff.

Operating Margin Customer:

“Operating Margin Customer” shall mean a Control Area purchasing Operating Margin pursuant to an agreement between such other Control Area and the LLC.

Operationally Deliverable:

“Operationally Deliverable” shall mean, as determined by the Office of the Interconnection, that there are no operational conditions, arrangements or limitations experienced or required that threaten, impair or degrade effectuation or maintenance of deliverability of capacity or energy from the external Generation Capacity Resource to loads in the PJM Region in a manner comparable to the deliverability of capacity or energy to such loads from Generation Capacity Resources located inside the metered boundaries of the PJM Region, including, without limitation, an identified need by an external Balancing Authority Area for a remedial action scheme or manual generation trip protocol, transmission facility switching arrangements that would have the effect of radializing load, or excessive or unacceptable frequency of regional reliability limit violations or (outside an interregional agreed congestion management process) of local reliability dispatch instructions and commitments.

Opportunity Cost:

“Opportunity Cost” shall mean a component of the Market Seller Offer Cap calculated in accordance with Tariff, Attachment DD, section 6.

OPSI Advisory Committee:

“OPSI Advisory Committee” shall mean the committee established under Tariff, Attachment M, section III.G.

Option to Build:

“Option to Build” shall mean the option of the New Service Customer to build certain Customer-Funded Upgrades, as set forth in, and subject to the terms of, the Construction Service Agreement.

Optional Interconnection Study:

“Optional Interconnection Study” shall mean a sensitivity analysis of an Interconnection Request based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

Optional Interconnection Study Agreement:

“Optional Interconnection Study Agreement” shall mean the form of agreement for preparation of an Optional Interconnection Study, as set forth in Attachment N-3 of the Tariff.

Part I:

“Part I” shall mean the Tariff Definitions and Common Service Provisions contained in sections 1 through 12A.

Part II:

“Part II” shall mean the Tariff sections 13 through 27A pertaining to Point-To-Point Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

Part III:

“Part III” shall mean the Tariff, sections 28 through 35 pertaining to Network Integration Transmission Service in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

Part IV:

“Part IV” shall mean the Tariff, sections 36 through 112C pertaining to generation or merchant transmission interconnection to the Transmission System in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

Part V:

“Part V” shall mean the Tariff, sections 113 through 122 pertaining to the deactivation of generating units in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

Part VI:

“Part VI” shall mean the Tariff, sections 200 through 237 pertaining to the queuing, study, and agreements relating to New Service Requests, and the rights associated with Customer-Funded Upgrades in conjunction with the applicable Common Service Provisions of Tariff, Part I and appropriate Schedules and Attachments.

Participant:

“Participant” shall mean a Market Participant and/or Transmission Customer and/or Applicant requesting to be an active Market Participant and/or Transmission Customer.

Parties:

“Parties” shall mean the Transmission Provider, as administrator of the Tariff, and the Transmission Customer receiving service under the Tariff. PJMSettlement shall be the Counterparty to Transmission Customers.

Peak-Hour Dispatch:

“Peak-Hour Dispatch” shall mean, for purposes of calculating the Energy and Ancillary Services Revenue Offset under Tariff, Attachment DD, section 5, an assumption, as more fully set forth in the PJM Manuals, that the Reference Resource is committed in the Day-Ahead Energy Market in four distinct blocks of four hours of continuous output for each block from the peak-hour period beginning with the hour ending 0800 EPT through to the hour ending 2300 EPT for any day when the average day-ahead LMP for the area for which the Net Cost of New Entry is being determined is greater than, or equal to, the cost to generate (including the cost for a complete start and shutdown cycle) for at least two hours during each four-hour block, where such blocks shall be assumed to be committed independently; provided that, if there are not at least two economic hours in any given four-hour block, then the Reference Resource shall be assumed not to be committed for such block; and to the extent not committed in any such block in the Day-Ahead Energy Market under the above conditions based on Day-Ahead LMPs, is dispatched in the Real-Time Energy Market for such block if the Real-Time LMP is greater than or equal to the cost to generate under the same conditions as described above for the Day-Ahead Energy Market.

Peak Market Activity:

“Peak Market Activity” shall mean a measure of exposure for which credit is required, involving peak exposures in rolling three-week periods over a year timeframe, with two semi-annual reset points, pursuant to provisions of Tariff, Attachment Q, section V.A. Peak Market Activity shall exclude FTR Net Activity, Virtual Transactions Net Activity, and Export Transactions Net Activity.

Peak Season:

“Peak Season” shall mean the weeks containing the 24th through 36th Wednesdays of the calendar year. Each such week shall begin on a Monday and end on the following Sunday, except for the week containing the 36th Wednesday, which shall end on the following Friday.

Percentage Internal Resources Required:

“Percentage Internal Resources Required” shall have the meaning specified in the Reliability Assurance Agreement.

Performance Assessment *Interval*:

“Performance Assessment *Interval*” shall mean each *Real-time Settlement Interval* for which an Emergency Action has been declared by the Office of the Interconnection, provided, however, that Performance Assessment *Intervals* for a Base Capacity Resource shall not include any *intervals* outside the calendar months of June through September.

PJM:

“PJM” shall mean PJM Interconnection, L.L.C., including the Office of the Interconnection as referenced in the PJM Operating Agreement.

PJM Administrative Service:

“PJM Administrative Service” shall mean the services provided by PJM pursuant to Tariff, Schedule 9.

PJM Board:

“PJM Board” shall mean the Board of Managers of the LLC, except when such term is being used in Attachment M of the Tariff, in which case PJM Board shall mean the Board of Managers of PJM or its designated representative, exclusive of any members of PJM Management.

PJM Control Area:

“PJM Control Area” shall mean the Control Area that is recognized by NERC as the PJM Control Area.

PJM Entities:

“PJM Entities” shall mean PJM, including the Market Monitoring Unit, the PJM Board, and PJM’s officers, employees, representatives, advisors, contractors, and consultants.

PJM Interchange:

“PJM Interchange” shall mean the following, as determined in accordance with the Schedules to the Tariff: (a) for a Market Participant that is a Network Service User, the amount by which its *interval* Equivalent Load exceeds, or is exceeded by, the sum of the *interval* outputs of its operating generating resources; or (b) for a Market Participant that is not a Network Service User, the amount of its Spot Market Backup; or (c) the *interval* scheduled deliveries of Spot Market Energy by a Market Seller from an External Resource; or (d) the *interval* net metered output of any other Market Seller; or (e) the *interval* scheduled deliveries of Spot Market Energy to an External Market Buyer; or (f) the *interval* scheduled deliveries to an Internal Market Buyer that is not a Network Service User.

PJM Interchange Energy Market:

“PJM Interchange Energy Market” shall mean the regional competitive market administered by the Transmission Provider for the purchase and sale of spot electric energy at wholesale interstate commerce and related services, as more fully set forth in Operating Agreement, Schedule 1, and the parallel provisions of Tariff, Attachment K – Appendix.

PJM Interchange Export:

“PJM Interchange Export” shall mean the following, as determined in accordance with the Schedules to the Tariff: (a) for a Market Participant that is a Network Service User, the amount by which its *interval* Equivalent Load is exceeded by the sum of the *interval* outputs of its operating generating resources; or (b) for a Market Participant that is not a Network Service User, the amount of its Spot Market Backup sales; or (c) the *interval* scheduled deliveries of Spot Market Energy by a Market Seller from an External Resource; or (d) the *interval* net metered output of any other Market Seller.

PJM Interchange Import:

“PJM Interchange Import” shall mean the following, as determined in accordance with the Schedules to the Tariff: (a) for a Market Participant that is a Network Service User, the amount by which its *interval* Equivalent Load exceeds the sum of the *interval* outputs of its operating generating resources; or (b) for a Market Participant that is not a Network Service User, the amount of its Spot Market Backup purchases; or (c) the *interval* scheduled deliveries of Spot Market Energy to an External Market Buyer; or (d) the *interval* scheduled deliveries to an Internal Market Buyer that is not a Network Service User.

PJM Liaison:

“PJM Liaison” shall mean the liaison established under Tariff, Attachment M, section III.I.

PJM Management:

“PJM Management” shall mean the officers, executives, supervisors and employee managers of PJM.

PJM Manuals:

“PJM Manuals” shall mean the instructions, rules, procedures and guidelines established by the Office of the Interconnection for the operation, planning, and accounting requirements of the PJM Region and the PJM Interchange Energy Market.

PJM Markets:

“PJM Markets” shall mean the PJM Interchange Energy and capacity markets, including the RPM auctions, together with all bilateral or other wholesale electric power and energy transactions, capacity transactions, ancillary services transactions (including black start service), transmission transactions and any other market operated under the PJM Tariff or Operating Agreement within the PJM Region, wherein Market Participants may incur Obligations to PJM Settlement.

PJM Market Rules:

“PJM Market Rules” shall mean the rules, standards, procedures, and practices of the PJM Markets set forth in the PJM Tariff, the PJM Operating Agreement, the PJM Reliability Assurance Agreement, the PJM Consolidated Transmission Owners Agreement, the PJM Manuals, the PJM Regional Practices Document, the PJM-Midwest Independent Transmission System Operator Joint Operating Agreement or any other document setting forth market rules.

PJM Net Assets:

“PJM Net Assets” shall mean the total assets per PJM’s consolidated quarterly or year-end financial statements most recently issued as of the date of the receipt of written notice of a claim less amounts for which PJM is acting as a temporary custodian on behalf of its Members, transmission developers/Designated Entities, and generation developers, including, but not limited to, cash deposits related to credit requirement compliance, study and/or interconnection receivables, member prepayments, invoiced amounts collected from Net Buyers but have not yet been paid to Net Sellers, and excess congestion (as described in Operating Agreement, Schedule 1, section 5.2.6, and the parallel provisions of Tariff, Attachment K-Appendix).

PJM Open Access Transmission Tariff (“O.A.T.T.”):

“PJM Open Access Transmission Tariff” or “O.A.T.T” shall mean the Open Access Transmission Tariff of PJM Interconnection, L.L.C., on file with the Federal Energy Regulatory Commission, and as revised from time to time.

PJM Open Access Same-time Information System:

“PJM Open Access Same-time Information System” shall mean the electronic communication system for the collection and dissemination of information about transmission services in the

PJM Region, established and operated by the Office of the Interconnection in accordance with FERC standards and requirements.

PJM Operating Agreement:

“PJM Operating Agreement” shall mean the Amended and Restated Operating Agreement of PJM on file with the Commission.

PJM Region:

“PJM Region” shall have the meaning specified in the Operating Agreement.

PJM Regional Practices Document:

“PJM Regional Practices Document” shall mean the document of that title that compiles and describes the practices in the PJM Markets and that is made available in hard copy and on the Internet.

PJM Region Installed Reserve Margin:

“PJM Region Installed Reserve Margin” shall have the meaning specified in the Operating Agreement.

PJM Region Peak Load Forecast:

“PJM Region Peak Load Forecast” shall mean the peak load forecast used by the Office of the Interconnection in determining the PJM Region Reliability Requirement, and shall be determined on both a preliminary and final basis as set forth in Tariff, Attachment DD, section 5.

PJM Region Reliability Requirement:

“PJM Region Reliability Requirement” shall mean, for purposes of the Base Residual Auction, the Forecast Pool Requirement multiplied by the Preliminary PJM Region Peak Load Forecast, less the sum of all Preliminary Unforced Capacity Obligations of FRR Entities in the PJM Region; and, for purposes of the Incremental Auctions, the Forecast Pool Requirement multiplied by the updated PJM Region Peak Load Forecast, less the sum of all updated Unforced Capacity Obligations of FRR Entities in the PJM Region.

PJM Reliability Assurance Agreement:

“PJM Reliability Assurance Agreement” shall mean the Reliability Assurance Agreement among Load Serving Entities in the PJM Region on file with the Commission.

PJM Settlement:

“PJM Settlement” or “PJM Settlement, Inc.” shall mean PJM Settlement, Inc. (or its successor), established by PJM as set forth in Section 3.3 of the Operating Agreement.

PJM Tariff:

“PJM Tariff” or “Tariff shall mean that certain “PJM Open Access Transmission Tariff”, including any schedules, appendices or exhibits attached thereto, on file with FERC and as amended from time to time thereafter.

PJM Transmission Owners Agreement:

“PJM Transmission Owners Agreement” shall mean the PJM Consolidated Transmission Owners Agreement on file with the Commission.

Plan:

“Plan” shall mean the PJM market monitoring plan set forth in Tariff, Attachment M.

Planned Demand Resource:

“Planned Demand Resource” shall have the meaning specified in the Reliability Assurance Agreement.

Planned External Financed Generation Capacity Resource:

“Planned External Financed Generation Capacity Resource” shall mean a Planned External Generation Capacity Resource that, prior to August 7, 2015, has an effective agreement that is the equivalent of an Interconnection Service Agreement, has submitted to the Office of the Interconnection the appropriate certification attesting achievement of Financial Close, and has secured at least 50 percent of the MWs of firm transmission service required to qualify such resource under the deliverability requirements of the Reliability Assurance Agreement.

Planned External Generation Capacity Resource:

“Planned External Generation Capacity Resource” shall have the meaning specified in the Reliability Assurance Agreement.

Planned Financed Generation Capacity Resource:

“Planned Financed Generation Capacity Resource” shall mean a Planned Generation Capacity Resource that, prior to August 7, 2015, has an effective Interconnection Service Agreement and has submitted to the Office of the Interconnection the appropriate certification attesting achievement of Financial Close.

Planned Generation Capacity Resource:

“Planned Generation Capacity Resource” shall have the meaning specified in the Reliability Assurance Agreement.

Planning Period:

“Planning Period” shall have the meaning specified in the Reliability Assurance Agreement.

Planning Period Balance:

“Planning Period Balance” shall mean the entire period of time remaining in the Planning Period following the month that a monthly auction is conducted.

Planning Period Quarter:

“Planning Period Quarter” shall mean any of the following three month periods in the Planning Period: June, July and August; September, October and November; December, January and February; or March, April and May.

Point(s) of Delivery:

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

Point of Interconnection:

“Point of Interconnection” shall mean the point or points where the Customer Interconnection Facilities interconnect with the Transmission Owner Interconnection Facilities or the Transmission System.

Point(s) of Receipt:

“Point(s) of Receipt” shall mean point(s) of interconnection on the Transmission Provider’s Transmission System where capacity and energy will be made available to the Transmission Provider by the Delivering Party under Tariff, Part II. The Point(s) of Receipt shall be specified in the Service Agreement for Long-Term Firm Point-To-Point Transmission Service.

Point-To-Point Transmission Service:

“Point-To-Point Transmission Service shall mean the reservation and transmission of capacity and energy on either a firm or non-firm basis from the Point(s) of Receipt to the Point(s) of Delivery under Tariff, Part II.

Power Purchaser:

“Power Purchaser” shall mean the entity that is purchasing the capacity and energy to be transmitted under the Tariff.

PRD Curve:

“PRD Curve” shall have the meaning provided in the Reliability Assurance Agreement.

PRD Provider:

“PRD Provider” shall have the meaning provided in the Reliability Assurance Agreement.

PRD Reservation Price:

“PRD Reservation” Price shall have the meaning provided in the Reliability Assurance Agreement.

PRD Substation:

“PRD Substation” shall have the meaning provided in the Reliability Assurance Agreement.

Pre-Confirmed Application:

“Pre-Confirmed Application” shall be an Application that commits the Eligible Customer to execute a Service Agreement upon receipt of notification that the Transmission Provider can provide the requested Transmission Service.

Pre-Emergency Load Response Program:

“Pre-Emergency Load Response Program” shall be the program by which Curtailment Service Providers may be compensated by PJM for Demand Resources that will reduce load when dispatched by PJM during pre-emergency conditions, and is described in Section 8 of Schedule 1 of the Operating Agreement and the parallel provisions of Section 8 of Attachment K-Appendix of the Tariff.

Pre-Expansion PJM Zones:

“Pre-Expansion PJM Zones” shall be zones included in the Tariff, along with applicable Schedules and Attachments, for certain Transmission Owners – Atlantic City Electric Company, Baltimore Gas and Electric Company, Delmarva Power and Light Company, Jersey Central Power and Light Company, Mid-Atlantic Interstate Transmission, LLC (“MAIT”) (MAIT owns and operates the transmission facilities in the Metropolitan Edison Company Zone and the Pennsylvania Electric Company Zone), PECO Energy Company, Pennsylvania Power & Light Group, Potomac Electric Power Company, Public Service Electric and Gas Company, Allegheny Power, and Rockland Electric Company.

Price Responsive Demand:

“Price Responsive Demand” shall have the meaning provided in the Reliability Assurance Agreement.

Primary Reserve:

“Primary Reserve” shall mean the total reserve capability of generation resources that can be converted fully into energy or Demand Resources whose demand can be reduced within ten minutes of a request from the Office of the Interconnection dispatcher, and is comprised of both Synchronized Reserve and Non-Synchronized Reserve.

Primary Reserve Alert

“Primary Reserve Alert” shall mean a notification from PJM to alert Members of an anticipated shortage of Operating Reserve capacity for a future critical period.

Primary Reserve Requirement:

“Primary Reserve Requirement” shall mean the megawatts required to be maintained in a Reserve Zone or Reserve Sub-zone as Primary Reserve, absent any increase to account for additional reserves scheduled to address operational uncertainty. The Primary Reserve Requirement is calculated in accordance with the PJM Manuals.

Prior CIL Exception External Resource:

“Prior CIL Exception External Resource” shall mean an external Generation Capacity Resource for which (1) a Capacity Market Seller had, prior to May 9, 2017, cleared a Sell Offer in an RPM Auction under the exception provided to the definition of Capacity Import Limit as set forth in Article I of the Reliability Assurance Agreement or (2) an FRR Entity committed, prior to May 9, 2017, in an FRR Capacity Plan under the exception provided in the definition of Capacity Import Limit. In the event only a portion (in MW) of an external Generation Capacity Resource has a Pseudo-Tie into the PJM Region, that portion of the external Generation Capacity Resource, which can include up to the maximum megawatt amount cleared in any prior RPM auction or committed in an FRR Capacity Plan (and no other portion thereof) is eligible for treatment as a Prior CIL Exception External Resource if such portion satisfies the requirements of the first sentence of this definition.

Project Financing:

“Project Financing” shall mean: (a) one or more loans, leases, equity and/or debt financings, together with all modifications, renewals, supplements, substitutions and replacements thereof, the proceeds of which are used to finance or refinance the costs of the Customer Facility, any alteration, expansion or improvement to the Customer Facility, the purchase and sale of the Customer Facility or the operation of the Customer Facility; (b) a power purchase agreement pursuant to which Interconnection Customer’s obligations are secured by a mortgage or other lien on the Customer Facility; or (c) loans and/or debt issues secured by the Customer Facility.

Project Finance Entity:

“Project Finance Entity” shall mean: (a) a holder, trustee or agent for holders, of any component of Project Financing; or (b) any purchaser of capacity and/or energy produced by the Customer Facility to which Interconnection Customer has granted a mortgage or other lien as security for some or all of Interconnection Customer’s obligations under the corresponding power purchase agreement.

Projected PJM Market Revenues:

“Projected PJM Market Revenues” shall mean a component of the Market Seller Offer Cap calculated in accordance with Tariff, Attachment DD, section 6.

Proportional Multi-Driver Project:

“Proportional Multi-Driver Project” shall have the same meaning provided in the Operating Agreement.

Pseudo-Tie:

“Pseudo-Tie” shall have the same meaning provided in the Operating Agreement.

Public Policy Objectives:

“Public Policy Objectives” shall have the same meaning provided in the Operating Agreement.

Public Policy Requirements:

“Public Policy Requirements” shall have the same meaning provided in the Operating Agreement.

Qualifying Transmission Upgrade:

“Qualifying Transmission Upgrade” shall mean a proposed enhancement or addition to the Transmission System that: (a) will increase the Capacity Emergency Transfer Limit into an LDA by a megawatt quantity certified by the Office of the Interconnection; (b) the Office of the Interconnection has determined will be in service on or before the commencement of the first Delivery Year for which such upgrade is the subject of a Sell Offer in the Base Residual Auction; (c) is the subject of a Facilities Study Agreement executed before the conduct of the Base Residual Auction for such Delivery Year and (d) a New Service Customer is obligated to fund through a rate or charge specific to such facility or upgrade.

Queue Position:

“Queue Position” shall mean the priority assigned to an Interconnection Request, a Completed Application, or an Upgrade Request pursuant to applicable provisions of Tariff, Part VI.

36.2A Modification of Interconnection Request:

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

The following language for 36.2A.1 and 36.2A.2 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.2 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 output (MW) (in the case of

a Generation Interconnection Request) 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 section 36.2A.6. The Interconnection Customer may reduce its project by up to 15 percent of the electrical output (MW) (in the case of a Generation Interconnection Request) 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 output (MW) (in the case of a Generation Interconnection Request) 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 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.2, subject to the limitation described in section 36.2A.6. The Interconnection Customer may reduce its project by the greater of 10 MW or 5 percent of the electrical output (MW) (in the case of a Generation Interconnection Request) 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 output (MW) (in the case of a Generation Interconnection Request) 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.3

Prior to making any modifications other than those specifically permitted by Sections 36.2A.1, 36.2A.2 and 36.2A.5, the Interconnection Customer may first request that the Transmission Provider evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the Transmission Provider shall evaluate the proposed modifications prior to making them and shall inform the Interconnection Customer in writing of whether the modification(s) would constitute a Material Modification. For purposes of this Section 36.2A.3, any change to the Point of Interconnection (other than a change deemed acceptable under Sections 36.1.5, 36.2.1, or 36.2A.1) or increase in generating capacity shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

36.2A.4

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

36.2A.5

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

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.6

An Interconnection Customer may be assigned a new queue position as provided for in sections 36.2A.1.2 or 36.2A.2 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 sections 36.2A.1 .2 or 36.2A.2, then the Interconnection Request shall be terminated and withdrawn if the Interconnection Customer proceeds with such change.

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 Section 204.3A of the Tariff. In some cases, where no network impacts are identified and there are no other projects in the vicinity of the small resource addition, the System Impact Study may not be required and the project will proceed directly to the Facilities Study.

110.3 System Impact Study

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

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 Part VI, Section 206. Transmission Provider will utilize the procedures set forth in Part VI, 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 Part VI, 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.

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 Section 204.3A of the Tariff. In some cases, where no network impacts are identified and there are no other projects in the vicinity of the small resource addition, the System Impact Study may not be required and the project will proceed directly to the Facilities Study.

111.3 System Impact Study

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

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

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

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

Once the System Impact Study is completed, a System Impact Study report will be prepared and transmitted to the Interconnection Customer along with a Facilities Study Agreement. In order to remain in the New Services Queue, the Interconnection Customer 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 Part VI, Section 206. Transmission Provider will utilize the procedures set forth in Part VI, 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 Part VI, 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.

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.

204.1 Completed Applications:

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

204.3 Interconnection Requests:

Upon completion of the Interconnection Feasibility Study, the Transmission Provider shall tender to the affected Interconnection Customer a System Impact Study Agreement. For an Interconnection Request to retain its assigned Queue Position pursuant to Section 201, within 30 days of receiving the tendered System Impact Study Agreement, the Interconnection Customer (i) shall execute the System Impact Study Agreement and it must be received by the Transmission Provider, (ii) shall remit to Transmission Provider all past due amounts of the actual Feasibility Study costs exceeding the Feasibility Study deposit fee contained in Sections 36.1.02, 36.1.03, 110.1, 111.1, and 112.1 of the Tariff, if any, (iii) shall pay the Transmission Provider a deposit as provided in 204.3A below, (iv) shall identify the Point(s) of Interconnection, and (v) in the case of a Generation Interconnection Customer, shall (A) demonstrate that it has made an initial application for the necessary air emission permits, if any, for its proposed generation, (B) specify whether it desires to interconnect its generation to the Transmission System as a Capacity Resource or an Energy Resource, (C) provide required machine modeling data as specified in the PJM Manuals, (D) in the case of a wind generation facility, provide a detailed electrical design specification and other data (including system layout data) as required by the Transmission Provider for completion of the System Impact Study, and (E) notify the Transmission Provider if it seeks to use Capacity Interconnection Rights in accordance with Section 230.3.3; or, (vi) in the case of a Transmission Interconnection Customer, shall (A) provide Transmission Provider with evidence of an ownership interest in, or right to acquire or control, the site(s) where major equipment (e.g., a new transformer or D.C. converter stations) would be installed, such as a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider; (B) demonstrate in a manner acceptable to Transmission Provider that it holds rights to use (or an option to obtain such rights) any existing facilities of the Transmission System that are necessary for construction of the proposed Merchant Transmission Facilities; and (C) provide required modeling data as specified in the PJM Manuals. If an Interconnection Customer fails to comply with any of the applicable listed requirements, its Interconnection Request shall be deemed terminated and withdrawn, however in the event that the information required per (v) (C), (v) (D), or (vi) (C) above is provided and deemed to be deficient by the Transmission Provider, Interconnection Customer may provide additional information acceptable to the Transmission Provider within 10 Business Days. Failure of the Interconnection Customer to provide information identified as being deficient within 10 Business Days shall result in the Interconnection Request being terminated and withdrawn. If a terminated and withdrawn Interconnection Request was to be included in a System Impact Study evaluating more than one New Service Request, then the costs of the System Impact Study shall be redetermined and reallocated among the remaining participating New Service Customers as specified in this Section 204.

204.3A Deposits for Interconnection Customers

1. Provided that the maximum total deposit amount for a System Impact Study shall be \$300,000 regardless of the size of the proposed Customer Facility, a System Impact Study deposit shall be submitted to Transmission Provider, as follows:

- a. For a proposed Customer Facility that is 20 MW or greater, a deposit of \$500 for each MW requested; or
 - b. For a proposed Customer Facility that is 2 MW or greater, but less than 20 MW, a deposit of \$10,000; or
 - c. For a proposed Customer Facility that is less than 2 MW, a deposit of \$5,000.
2. 10% of each total System Impact Study 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 Interconnection Requests by the Interconnection Customer.
3. 90% of each total System Impact Study deposit amount is refundable, and the Transmission Provider shall utilize, in no particular order, the refundable portion of each total System Impact Study deposit amount to cover the following:
- a. The cost of the System Impact Study acceptance review; and
 - b. The dollar amount of the Interconnection Customer's cost responsibility for the System Impact Study; and
 - c. If the System Impact Study Request is deemed to be modified (pursuant to Section 36.2A of the Tariff), rejected, terminated and/or withdrawn during the deficiency review and/or deficiency response period, as described further below, or during the System Impact 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 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, rejection, termination and/or withdrawal of such 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 System Impact Study 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 Interconnection Requests by such 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 customer in accordance with the PJM Manuals.
4. Upon completion of the System Impact Study, the Transmission Provider shall apply any remaining refundable deposit monies toward:
 - a. The cost responsibility of the Interconnection Customer for any other studies conducted for the Interconnection Request; and/or
 - b. Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior New Service Requests and/or Interconnection Requests by such Interconnection Customer.
5. If any refundable deposit monies remain after the System Impact 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 Interconnection Requests by such 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 System Impact Study Request. If the Interconnection Customer fails to submit the total required deposit amount with the System Impact Study Request, the System Impact Study Request shall be deemed to be terminated and withdrawn.

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

206.2 Retaining Queue Position:

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

206.3 Deposit:

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

212.1 Cost Reimbursement:

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

212.4 Retaining Priority and Security:

(a) **Retaining Priority:** To retain the assigned Queue Position of its Interconnection Request pursuant to Section 201, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the Interconnection Customer must have executed the tendered Interconnection Service Agreement and it must be in the possession of the Transmission Provider or, alternatively, request (i) dispute resolution under Section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or (ii) that the Interconnection Service Agreement be filed unexecuted with the Commission. In addition, to retain the assigned priority, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the Interconnection Customer must have met the milestones specified in Section 212.5.

(b) **Security:** (1) At the time the Interconnection Customer executes and returns to the Transmission Provider the Interconnection Service Agreement (or requests dispute resolution or that it be filed unexecuted), the Interconnection Customer also shall, unless otherwise deferred as set forth in subsection (c) below, provide the Transmission Provider (for the benefit of the affected Transmission Owner(s)) with a letter of credit or other reasonable form of security acceptable to the Transmission Provider that names the Transmission Provider as beneficiary and is in an amount equivalent to the sum of the estimated costs determined by the Transmission Provider of (i) the required Non-Direct Connection Local Upgrades and Non-Direct Connection Network Upgrades, (ii) any Network Upgrades that the Interconnected Transmission Owner will be responsible for constructing (including with respect to both items (i) and (ii) required upgrades for which another Interconnection Customer also has cost responsibility pursuant to Section 217), and either (iii) the estimated cost of the work that the Transmission Owner will be responsible for performing on the required Attachment Facilities, Direct Connection Local Upgrades, and Direct Connection Network Upgrades that are scheduled to be completed during the first three months after such work commences in earnest, or (iv) in the event that the Interconnection Customer exercises the Option to Build pursuant to Section 3.2.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P to the Tariff), all Cancellation Costs and the first three months of estimated Transmission Owner's Costs associated with the Interconnection Customer's building Attachment Facilities, Direct Connection Local Upgrades, and/or Direct Connection Network Upgrades, including but not limited to Costs for tie-in work, consistent with commercial practices as established by the Uniform Commercial Code. Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities to satisfy itself that the Interconnection Customer is complying with the Transmission Owner's standards and specifications for the construction of facilities) only if the Transmission Owner and the Interconnection Customer mutually agree to the inclusion of such costs under the Option to Build pursuant to the provisions of Section 3.2.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P of the Tariff). Notwithstanding the foregoing, for projects that are estimated to require three months or less to construct, the sum of such security and the payment for the first quarterly invoice for the project shall not exceed an amount equal to 125% of the total estimated cost of construction. The Transmission Provider shall provide the affected Transmission Owner(s) with a copy of the letter

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

(2) Transmission Provider shall invoice Interconnection Customer for work by the Interconnected Transmission Owner and Transmission Provider on a quarterly basis for the costs to be expended in the subsequent three months. Interconnection Customer shall pay invoiced amounts within twenty (20) days of receipt of the invoice. Interconnection Customer may request in the Interconnection Service Agreement that the Transmission Provider provide a quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Section 11.2.3 of Appendix 2 of the Interconnection Service Agreement shall govern the timing of the final cost reconciliation upon completion of the work.

(3) Transmission Provider shall hold the security related to construction until as-built drawings are received and settlement of the final invoice; security related to construction may be reduced as construction progresses.

(c) **Deferred Security:** Interconnection Customer may request to defer providing security under subsection (b) of this Section 212.4 until no later than 120 days after Interconnection Customer executes the Interconnection Service Agreement. Upon Interconnection Customer's request to defer security, PJM shall determine if any other queued New Service Customer with a completed System Impact Study would require any Local Upgrade(s) and/or Network Upgrade(s) for which Interconnection Customer has cost responsibility under the Interconnection Service Agreement. Interconnection Customer may defer security only for Local Upgrade(s) and/or Network Upgrade(s) for which no other such queued New Service Customer may require, provided Interconnection Customer shall pay a deposit of at least \$200,000 or 125% of the estimated costs that will be incurred during the 120-day period, whichever is greater, to fund continued design work and/or procurement activities on such non-shared Local Upgrade(s) and/or Network Upgrade(s), with \$100,000 of such deposit being non-refundable. If the Interconnection Customer terminates the Interconnection Service Agreement or is otherwise withdrawn, any unused portion of the non-refundable deposit will be used to fund re-studies due to such termination or withdrawal. Any remaining deposit monies, refundable or non-refundable, will be returned to an Interconnection Customer upon Initial Operation.

(d) **Withdrawal:** If an Interconnection Customer fails to timely execute the Interconnection Service Agreement (or request dispute resolution or that the agreement be filed unexecuted), meet the milestones (unless extended) set forth in Section 212.5, or provide the security prescribed in this Section 212.4, its Interconnection Request shall be deemed terminated and withdrawn. In the event that a terminated and withdrawn Interconnection Request was included in a Facilities Study that evaluated more than one New Service Request, or in the event that a New Service Customer's participation in and cost responsibility for a Network Upgrade or Local Upgrade is terminated in accordance with Subpart C of Part VI of the Tariff, the Transmission Provider shall reevaluate the need for the facilities and upgrades indicated by the Facilities Study, shall re-determine the cost responsibility of each remaining New Service Customer for the

necessary facilities and upgrades based on its assigned priority pursuant to Section 201, and shall enter into an amended Interconnection Service Agreement with each remaining Interconnection Customer setting forth its revised cost obligation. In such event, if the amount of an Interconnection Customer's cost responsibility increases, the Interconnection Customer shall provide additional security pursuant to this Section 212.4.

212.6 Interconnection Construction Service Agreement and Commencement of Construction:

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

213.1 Cost Reimbursement:

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

213.4 Retaining Priority and Security:

(a) Retaining Priority: To retain the assigned Queue Position of its New Service Request pursuant to Section 201, within sixty (60) days after receipt of the Facilities Study (or, if no Facilities Study was required, after receipt of the System Impact Study), the New Service Customer either shall have executed the tendered Upgrade Construction Service Agreement and it must be in possession of the Transmission Provider or, alternatively, request (i) dispute resolution under Section 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or (ii) that the Upgrade Construction Service Agreement be filed unexecuted with the Commission.

(b) Security: (1) At the time the New Service Customer executes and returns to the Transmission Provider the Upgrade Construction Service Agreement (or requests dispute resolution or that it be filed unexecuted), the New Service Customer also shall, unless otherwise deferred as set forth in subsection (c) below, provide the Transmission Provider (for the benefit of the affected Transmission Owner(s)) with a letter of credit or other reasonable form of security acceptable to the Transmission Provider that names the Transmission Provider as beneficiary and is in an amount equivalent to the sum of the estimated costs determined by the Transmission Provider of (i) the required Direct Assignment Facilities, Non-Direct Connection Local Upgrades and/or Non-Direct Connection Network Upgrades (including required upgrades for which another New Service Customer also has cost responsibility pursuant to Section 217), (ii) the estimated cost of work that the New Service Customer will be responsible for performing on the required Direct Assignment Facilities, Direct Connection Local Upgrades, and/or Direct Connection Network Upgrades that are scheduled to be completed during the first three months after such work commences in earnest, and (iii) in the event that the New Service Customer exercised the Option to Build pursuant to Section 6.2.1 of Appendix III of the form of Upgrade Construction Service Agreement (set forth in Attachment GG to the Tariff), all Cancellation Costs and the first three months of estimated Transmission Owner's Costs associated with the New Service Customer's building Direct Assignment Facilities, Direct Connection Local Upgrades, and/or Direct Connection Network Upgrades, including but not limited to Costs for inspections, testing, and tie-in work, consistent with commercial practices as established by the Uniform Commercial Code. Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities to satisfy itself that the New Service Customer is complying with the Transmission Owner's standards and specifications for the construction of facilities) only if the Transmission Owner and the New Service Customer mutually agree to the inclusion of such costs under the Option to Build pursuant to the provisions of Section 6.2.1 of Appendix III of the form of Upgrade Construction Service Agreement (set forth in Attachment GG of the Tariff). Notwithstanding the foregoing, for projects that are estimated to require three months or less to construct, the sum of such security and the payment for the first quarterly invoice for the project shall not exceed an amount equal to 125% of the total estimated cost of construction.

The Transmission Provider shall provide the affected Transmission Owner(s) with a copy of the letter of credit or other form of security. After execution of the Upgrade Construction Service Agreement, the amount of Security required may be adjusted from time to time in accordance with Section 9.1 of Appendix III of the Upgrade Construction Service Agreement.

(2) Transmission Provider shall invoice New Service Customer for work by the Transmission Owner on a quarterly basis for the costs to be expended in the subsequent three months. Customer shall pay invoiced amounts within twenty (20) days of receipt of the invoice. New Service Customer may request in the Upgrade Construction Service Agreement that the Transmission Provider provide a quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Section 9.3 of Appendix III of the Upgrade Construction Service Agreement shall govern the timing of the final cost reconciliation upon completion of the work.

(3) Security related to construction of Local Upgrades and/or Network Upgrades may be reduced as construction progresses.

(c) **Deferred Security:** New Service Customer may request to defer providing security under subsection (b) of this Section 213.4 until no later than 120 days after New Service Customer executes the Upgrade Construction Service Agreement. Upon New Service Customer's request to defer security, PJM shall determine if any other queued New Service Customer with a completed System Impact Study would require any Local Upgrade(s) and/or Network Upgrade(s) for which New Service Customer has cost responsibility under the Upgrade Construction Service Agreement. New Service Customer may defer security only for Local Upgrade(s) and/or Network Upgrade(s) for which no other such queued New Service Customer may require, provided New Service Customer shall pay a deposit of at least \$200,000 or 125% of the estimated costs that will be incurred during the 120-day period, whichever is greater, to fund continued design work and/or procurement activities on such non-shared Local Upgrade(s) and/or Network Upgrade(s), with \$100,000 of such deposit being non-refundable. If the New Service Customer terminates the Upgrade Construction Service Agreement or is otherwise withdrawn, any unused portion of the non-refundable deposit will be used to fund re-studies due to such termination or withdrawal. Any remaining deposit monies, refundable or non-refundable, will be returned to a New Service Customer upon Stage Two Energization of Completed Facilities.

(d) **Withdrawal:** If a New Service Customer fails to timely execute the Upgrade Construction Service Agreement (or request dispute resolution or that the agreement be filed unexecuted), or to provide the security prescribed in this Section, its New Service Request shall be deemed terminated and withdrawn. In the event that a terminated and withdrawn New Service Request was included in a Facilities Study that evaluated more than one New Service Request, or in the event that a New Service Customer's participation in and cost responsibility for a Network Upgrade or Local Upgrade is terminated in accordance with the Upgrade Construction Service Agreement, the Transmission Provider shall reevaluate the need for the facilities and upgrades indicated by the Facilities Study, shall redetermine the cost responsibility of each remaining New Service Customer for the necessary facilities and upgrades based on its assigned Queue Position pursuant to Section 201, and shall enter into an amended Interconnection Service Agreement or Upgrade Construction Service Agreement, as applicable, with each remaining New Service Customer setting forth its revised cost obligation. In such event, if the amount of a New Service

Customer's cost responsibility increases, the New Service Customer shall provide additional security pursuant to this Section.

216 Interconnection Requests Designated As Market Solutions:

The provisions of this section shall apply to any Interconnection Request related to a project that Transmission Provider determines, in accordance with Section 1.5.7(h) of Schedule 6 of the Operating Agreement could relieve a transmission constraint and which, in the judgment of the Transmission Provider, is economically justified (hereafter, a “market solution”).

217.3 Local and Network Upgrades:

(a) General: Each New Service Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Local Upgrades and Network Upgrades necessary to accommodate its New Service Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such New Service Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of Local Upgrades and Network Upgrades included in the Regional Transmission Expansion Plan either for reliability, or to relieve one or more transmission constraints and which, in the judgment of the Transmission Provider, are economically justified; the construction of Local Upgrades and Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the New Service Request; or the construction of Supplemental Projects.

(b) Cost Responsibility for Accelerating Local and Network Upgrades included in the Regional Transmission Expansion Plan: Where the New Service Request calls for accelerating the construction of a Local Upgrade or Network Upgrade that is included in the Regional Transmission Expansion Plan and provided that the party(ies) with responsibility for such construction can accomplish such an acceleration, the New Service Customer shall pay all costs that would not have been incurred under the Regional Transmission Expansion Plan but for the acceleration of the construction of the upgrade. The Responsible Customer(s) designated pursuant to Schedule 12 of the Tariff as having cost responsibility for such Local Upgrade or Network Upgrade shall be responsible for payment of only those costs that the Responsible Customer(s) would have incurred under the Regional Transmission Expansion Plan in the absence of the New Service Request to accelerate the construction of the Local Upgrade or Network Upgrade.

217.3a The Transmission Provider shall determine the minimum amount of required Local Upgrades and Network Upgrades required to resolve each reliability criteria violation in each New Services Queue, by studying the impact of the queued projects in their entirety, and not incrementally.

Local Upgrades and Network Upgrades shall be studied in their entirety and according to the following process:

(i) The Transmission Provider shall identify the first New Service Request in the queue contributing to the need for the required Local Upgrades and Network Upgrades within the New Services Queue. The initial New Service Request to cause the need for Local Upgrades or Network Upgrades will always receive a cost allocation. Costs for the minimum amount of Local Upgrades and Network Upgrades shall be further allocated to subsequent projects in the New Services Queue, pursuant to queue order, and pursuant to the New Service Request's megawatt contribution to the need for the Local Upgrades and Network Upgrades.

(ii) In the event a subsequent New Service Request in the queue causes the need for additional Local Upgrades or additional Network Upgrades, only this New Service Request and

the New Service Requests in the queue, which follow such subsequent New Service Request in the queue, shall be allocated the costs for these additional required Local Upgrades or Network Upgrades. The allocation shall be pursuant to queue order, and pursuant to the New Service Request's megawatt contribution to the need for the Local Upgrades and Network Upgrades.

Where a Local Upgrade or Network Upgrade included in the Regional Transmission Expansion Plan is classified as both a reliability-based and market efficiency project, a New Service Request cannot eliminate or defer such upgrade unless the request eliminates or defers both the reliability need and the market efficiency need identified in the Regional Transmission Expansion Plan.

**ATTACHMENT N-1
FORM OF
SYSTEM IMPACT STUDY AGREEMENT**

(PJM Queue Position #____)

RECITALS

1. This System Impact Study Agreement, dated as of _____, is entered into, by and between _____ ("New Service Customer") and PJM Interconnection, L.L.C. ("Transmission Provider") pursuant to Part VI of the PJM Interconnection, L.L.C. Open Access Transmission Tariff ("PJM Tariff").
2. The Transmission Provider has: (i) pursuant to Section 36.2 of the PJM Tariff, completed an Interconnection Feasibility Study and provided the results of that study to the New Service Customer; (ii) received a valid Upgrade Request; or (iii) pursuant to Section 19 or Section 32, as applicable, of the PJM Tariff, the Transmission Provider has completed a *Firm Transmission Feasibility* Study and provided the results of that study to the New Service Customer.
3. Pursuant to Sections 19.1, 32.1, 37, 110.2, 111.2, 204.1, 204.2, or 204.3, as applicable, of the PJM Tariff, the New Service Customer (i) requests that the Transmission Provider perform a System Impact Study, and (ii) agrees to submit a deposit of \$ _____ to the Transmission Provider which will be applied to the New Service Customer's cost responsibility for the System Impact Study, as set forth in Section 203 or 204 of the PJM Tariff.

PREVIOUS SUBMISSIONS

{For Interconnection Customers, use the following paragraph 4}

4. Except as otherwise specifically set forth in an attachment to this agreement, New Service Customer represents and warrants that the information provided in Section 3 of the Interconnection Feasibility Study Agreement dated _____, for the project designated _____ {insert Queue Position} by and between the New Service Customer and the Transmission Provider is accurate and complete as of the date of execution of this System Impact Study Agreement. New Service Customer further provides the following information and represents and warrants that said information is true and correct:

{For Generation Facilities, use the following paragraphs a through c}

- a. Specify whether the generation to be interconnected to the Transmission System is to be a Capacity Resource or an Energy Resource.

- b. Identification of evidence of initial application for the necessary air permits (attach documentation separately):

- c. Other information not previously provided that may be relevant to the study being conducted hereunder (attach generator data for stability study analysis):

{For Merchant Transmission Facilities, use the following paragraphs a through c}

- a. Provide evidence of ownership in, or right to acquire or control the site(s) where New Service Customer intends to install its major equipment, in the form of a deed, option agreement, lease or other similar document acceptable to PJM:

- b. Provide evidence of the rights or option to obtain such rights to use any existing transmission facilities within PJM that are necessary for construction of the proposed project.

- c. Other information not previously provided that may be relevant to the study being conducted hereunder:

{For New Service Customer other than Interconnection Customers, use the following paragraph 4}

- 4. Except as otherwise specifically set forth in an attachment to this agreement, New Service Customer represents and warrants that the information provided in Section ____ {insert applicable section number} of the New Service Request dated _____, for the request designated _____ {insert Queue Position} is accurate and complete as of the date of execution of this System Impact Study Agreement.

PURPOSE OF THE SYSTEM IMPACT STUDY

5. Consistent with Section 205 of the PJM Tariff, the Transmission Provider, in consultation with the affected Transmission Owner(s), shall conduct a System Impact Study that identifies the system constraints relating to the New Service Requests being evaluated in the study and the Attachment Facilities, Local Upgrades, and Network Upgrades necessary to accommodate such New Service Requests. It is expected that the System Impact Study will be completed by {insert date}. In the event that the Transmission Provider is unable to complete the System Impact Study by that date, the Transmission Provider shall notify the New Service Customer and explain the reasons for the delay.
6. The System Impact Study conducted hereunder will provide more comprehensive estimates of the cost and length of time required to accommodate the New Service Customer's New Service Request than those developed through the *Interconnection Feasibility Study*, *Upgrade Feasibility Study* or *Firm Transmission Feasibility Study*, if applicable, performed for the New Service Customer. These estimates shall represent a good faith attempt to determine the cost of necessary facilities and upgrades to accommodate the New Service Customer's New Service Request, and the New Service Customer's cost responsibility for them, but shall not be deemed final or binding. The scope of the System Impact Study {include for Merchant Transmission Facilities: may depend in part on the interconnection rights elected by the New Service Customer under Section 36.1.03 of the PJM Tariff and} may include (a) an assessment of sub-area import deliverability, (b) an assessment of sub-area export deliverability, (c) an assessment of project related system stability issues, (d) an assessment of project related short circuit duty issues, (e) a contingency analysis consistent with NERC's and each Applicable Regional Entity's reliability criteria, (f) an assessment of regional transmission upgrades that most effectively meet identified needs, and (g) an analysis to determine cost allocation responsibility for required facilities and upgrades. Final estimates will be developed only upon execution of a Facilities Study Agreement in accordance with Part VI of the PJM Tariff. The System Impact Study necessarily will employ various assumptions regarding the New Service Request, other pending requests, and PJM's Regional Transmission Expansion Plan at the time of the study. **IN NO EVENT SHALL THE SYSTEM IMPACT STUDY IN ANY WAY BE DEEMED TO OBLIGATE THE TRANSMISSION PROVIDER OR THE TRANSMISSION OWNERS THAT MAY INTERCONNECT WITH THE NEW SERVICE CUSTOMER TO CONSTRUCT ANY FACILITIES OR UPGRADES.**

CONFIDENTIALITY

7. The New Service Customer agrees to provide all information requested by the Transmission Provider necessary to complete the System Impact Study. Subject to paragraph 8 of this System Impact Study Agreement and to the extent required by Section 222 of the PJM Tariff, information provided pursuant to this Section 7 shall be and remain confidential.

8. Until completion of the System Impact Study, the Transmission Provider shall keep confidential all information provided to it by the New Service Customer. Pursuant to Section 205.4 of the PJM Tariff, upon completion of the System Impact Study, the Transmission Provider shall provide a copy of the System Impact Study to all New Service Customers whose New Service Requests were evaluated in the System Impact Study along with all related work papers. Additionally, Transmission Provider shall post on Transmission Provider's website (i) the existence of the System Impact Study, (ii) the New Service Customers that had New Service Requests evaluated in the System Impact Study, (iii) the location and size in megawatts of each New Service Customer's generation project, if applicable, and (iv) each New Service Customer's Queue Position. Additionally, New Service Customer acknowledges and consents to such other disclosures as may be required under the PJM Tariff or the FERC's rules and regulations.
9. New Service Customer acknowledges that, consistent with Part VI of the PJM Tariff, the Transmission Owners will participate in the System Impact Study process and that the Transmission Provider may disseminate information to the Transmission Owners and rely upon them to conduct part or all of the System Impact Study.

COST RESPONSIBILITY

10. The New Service Customer shall reimburse the Transmission Provider for the actual cost of the System Impact Study in accordance with its cost responsibility as determined under Sections 110.2, 111.2, 112.2, or 203 of the PJM Tariff. The refundable portion of the deposit described in Section 3 of this Agreement, paid by the New Service Customer pursuant to Sections 110.2, 111.2, 112.2, or 204.3A of the PJM Tariff, shall be applied toward the New Service Customer's System Impact Study cost responsibility. Pursuant to Section 204.3 of the PJM Tariff, during the acceptance review of this Agreement, in the event that the Transmission Provider anticipates that the New Service Customer's study cost responsibility will substantially exceed the refundable portion of the deposit, the Transmission Provider shall provide the New Service Customer with an estimate of the additional study costs and the New Service Customer's cost responsibility. 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 New Service Customer with notification of estimated additional study costs, the New Service Customer is responsible for and must pay all actual study costs. If the Transmission Provider provides the New Service Customer with notification of estimated additional study costs, the New Service Customer must pay such estimated additional study costs within ten business days of Transmission Provider sending the New Service Customer notification of such estimated additional study costs. If the New Service Customer fails to pay such estimated additional study costs within ten business days of Transmission Provider sending the New Service Customer notification of such estimated additional study costs, then the New Service Request shall be deemed to be withdrawn and terminated.

DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

11. In analyzing and preparing the System Impact Study, the Transmission Provider, the Transmission Owner(s), and any other subcontractors employed by the Transmission Provider shall have to rely on information provided by the New Service Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY THE TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE SYSTEM IMPACT STUDY. The New Service Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this System Impact Study Agreement nor the System Impact Study prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by the Transmission Provider or the Transmission Owner(s) to provide any transmission or interconnection service to or on behalf of the New Service Customer either at this point in time or in the future.

12. In no event will the Transmission Provider, Transmission Owner(s) or other subcontractors employed by the Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether arising under this System Impact Study Agreement or otherwise, even if the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider have been advised of the possibility of such a loss. Nor shall the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of the Transmission Provider's obligations under this System Impact Study Agreement.

Without limitation of the foregoing, the New Service Customer further agrees that Transmission Owner(s) and other subcontractors employed by the Transmission Provider to prepare or assist in the preparation of any System Impact Study shall be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty/Limitation of Liability."

MISCELLANEOUS

- 13. Any notice or request made to or by either party regarding this System Impact Study Agreement shall be made to the representative of the other party as indicated below.

Transmission Provider

PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403

New Service Customer

- 14. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this System Impact Study Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 15. This System Impact Study Agreement or any part thereof, may not be amended, modified, or waived other than by a writing signed by all parties hereto.
- 16. This System Impact Study Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.
- 17. Neither this System Impact Study Agreement nor the System Impact Study performed hereunder shall be construed as an application for service under Part II or Part III of the PJM Tariff.
- 18. The provisions of Part VI of the PJM Tariff are incorporated herein and made a part hereof.
- 19. Capitalized terms used but not otherwise defined herein shall have the meaning ascribed to them in the PJM Tariff.
- 20. This System Impact Study Agreement shall become effective on the date it is executed by all parties and shall remain in effect until the earlier of (a) the date on which the Transmission Provider tenders the completed System Impact Study and a proposed Facilities Study Agreement to New Service Customer pursuant to Section 206 of the PJM Tariff, or (b) termination and withdrawal of the New Service Request(s) to which the System Impact Study hereunder relates.
- 21. No Third-Party Beneficiaries

This System Impact Study Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the parties, and the obligations herein assumed are solely for the use and benefit of the parties, their successors in interest and where permitted, their assigns.

22. Multiple Counterparts

This System Impact Study Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

23. No Partnership

This System Impact Study Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the parties or to impose any partnership obligation or partnership liability upon either party. Neither party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other party.

24. Severability

If any provision or portion of this System Impact Study Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the parties shall negotiate in good faith to restore insofar as practicable the benefits to each party that were affected by such ruling, and (3) the remainder of this System Impact Study Agreement shall remain in full force and effect.

25. Governing Law, Regulatory Authority, and Rules

For Interconnection Requests, the validity, interpretation and enforcement of this System Impact Study Agreement and each of its provisions shall be governed by the laws of the state of _____ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This System Impact Study Agreement is subject to all Applicable Laws and Regulations. Each party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

26. Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this System Impact Study Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this System Impact Study Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each party shall have the right to protest any such filing by the other party and to participate

fully in any proceeding before FERC in which such modifications may be considered. Nothing in this System Impact Study Agreement shall limit the rights of the parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Transmission Provider and the New Service Customer have caused this System Impact Study Agreement to be executed by their respective authorized officials.

Transmission Provider: PJM Interconnection, L.L.C.

By: _____
Name Title Date

Printed Name

New Service Customer: [Name of Party]

By: _____
Name Title Date

Printed Name

**ATTACHMENT N-2
FORM OF
FACILITIES STUDY AGREEMENT**

(PJM Queue Position #____)

RECITALS

1. This Facilities Study Agreement ("Agreement"), dated as of _____, is entered into by and between _____ ("New Service Customer") and PJM Interconnection, L.L.C. ("Transmission Provider"), pursuant to Part VI of the PJM Interconnection, L.L.C. Open Access Transmission Tariff ("PJM Tariff").
2. Pursuant to Section 36.2 or Section 205 of the PJM Tariff, Transmission Provider has completed a Generation or Transmission Interconnection Feasibility Study or an Initial Study (as applicable) and a System Impact Study and has provided the results of those studies to New Service Customer.
3. Transmission Provider has informed New Service Customer that the estimated date for completion of a Facilities Study pursuant to Section 206 of the PJM Tariff is {date} and that New Service Customer's estimated cost responsibility for such Facilities Study, subject to revision as provided in this Agreement, is \$ _____.
4. New Service Customer desires that Transmission Provider commence a Facilities Study for the New Service Request with Queue Position {queue position}.

PREVIOUS SUBMISSIONS

{For Interconnection Customers, use the following paragraph 5}

5. Except as otherwise specifically set forth in an attachment to this Agreement, New Service Customer represents and warrants that the information provided in section 3 of the Feasibility Study Agreement, dated _____, by and between New Service Customer and Transmission Provider, and to the extent supplemented as set forth in section 4 of the System Impact Study Agreement, dated _____, by and between New Service Customer and Transmission Provider, is accurate and complete as of the date of execution of this Facilities Study Agreement.

{For New Service Customers other than Interconnection Customers use the following paragraph 5}

5. Except as otherwise specifically set forth in an attachment to this Agreement, New Service Customer represents and warrants that the information provided in section 4 of the System Impact Study Agreement, dated _____, by and between New Service Customer and Transmission Provider, is accurate and complete as of the date of execution of this Facilities Study Agreement.

MILESTONES

6. Pursuant to Section 206.1 of the PJM Tariff, the parties agree that New Service Customer must meet the following milestone dates relating to the development of its generation or merchant transmission project(s) or New Service Request, as applicable, in order to retain the assigned Queue Position of its New Service Request(s) (as established pursuant to Section 201 of the PJM Tariff) while Transmission Provider is completing the Facilities Study:

[Specify Project Specific Milestones]

[As appropriate include the following standard Milestones, with any revisions necessary for the project at hand]

- 6.1 Unless New Service Customer previously specified, in its initial drawing submitted to Transmission Provider, the location of the high-side of the generator step-up transformer, then on or before _____, New Service Customer must provide evidence of an ownership interest in, or right to acquire or control the location which shall be on the high voltage side of the Customer Facility generator step-up transformer(s), or in the case of a Customer Facility with a single step-up transformer for multiple generators, the high voltage side of the facility step-up transformer. The evidence of site control shall be a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider.
- 6.2 To the extent New Service Customer intends to elect the Option to Build as provided in Appendix 2 to Attachment P of the Tariff, and to the extent any new or additional property is required to accommodate required Attachment Facilities and/or network substation, on or before _____, New Service Customer must provide evidence of an ownership interest in, or right to acquire or control the location which shall be the location of the network substation which shall be built and subsequently transferred to the Interconnected Transmission Owner. The evidence of site control shall be a deed, option agreement, lease, or other similar document acceptable to the Transmission Provider.

[Add Additional Project Specific Milestones as appropriate]

Should New Service Customer fail to achieve any of the foregoing milestones, its New Service Request(s) shall be deemed to be withdrawn and terminated and it will have to resubmit its New Service Request(s) for reassignment of a Queue Position and re-initiation of the New Service Request study process.

PURPOSE AND SCOPE OF THE FACILITIES STUDY

7. Transmission Provider, in consultation with the affected Transmission Owner(s), shall commence a Facilities Study pursuant to Section 206 of the PJM Tariff to evaluate the Attachment Facilities, Local Upgrades and/or Network Upgrades necessary to accommodate New Service Customer's New Service Request assigned Queue Position **{insert queue position}**. **{Add corresponding info on customer's other projects if necessary.}**
 - A. **Scope of Facilities Study:** The purpose of the Facilities Study is to provide, commensurate with any mutually agreed parameters regarding the scope and degree of specificity described in Schedule A attached to this agreement, conceptual engineering and, as appropriate, detailed design, plus cost estimates and project schedules, to implement the conclusions of the System Impact Study regarding the Attachment Facilities, Local Upgrades and Network Upgrades necessary to accommodate the New Service Customer's New Service Request(s). Cost estimates shall be determined in a manner consistent with Section 217 of the PJM Tariff. The nature and scope of the materials that Transmission Provider shall deliver to the New Service Customer upon completion of the Facilities Study shall be described in the PJM Manuals.
 - B. **Facilities Study Cost and Time Estimate:** Transmission Provider's estimates of the date for completion of the Facilities Study and of New Service Customer's cost responsibility for the Facilities Study are stated in section 3 of this Agreement. In the event that Transmission Provider determines that it will be unable to complete the Facilities Study by the estimated completion date stated in section 3 of this Agreement, it shall notify New Service Customer and will explain the reasons for the delay. New Service Customer agrees that its estimated cost responsibility stated in section 3 is subject to revision as provided in sections 14, 15 and 16 of this Agreement.
8. The Facilities Study necessarily will employ various assumptions regarding New Service Customer's New Service Request(s), other pending New Service Requests, and PJM's Regional Transmission Expansion Plan at the time of the study. **IN NO EVENT SHALL THIS AGREEMENT OR THE FACILITIES STUDY IN ANY WAY BE DEEMED TO OBLIGATE TRANSMISSION PROVIDER OR THE TRANSMISSION OWNERS TO CONSTRUCT ANY FACILITIES OR UPGRADES OR TO PROVIDE ANY TRANSMISSION OR INTERCONNECTION SERVICE TO OR ON BEHALF OF NEW SERVICE CUSTOMER EITHER AT THIS POINT IN TIME OR IN THE FUTURE.**

CONFIDENTIALITY

9. New Service Customer agrees to provide all information requested by Transmission Provider necessary to complete the Facilities Study. Subject to section 10 of this

Agreement and to the extent required by Section 222 of the PJM Tariff, information provided pursuant to this section 9 shall be and remain confidential.

10. Until completion of the Facilities Study, Transmission Provider shall keep confidential all information provided to it by the New Service Customer. Upon completion of the Facilities Study, Transmission Provider shall provide a copy of the study to New Service Customer, and to all other New Service Customers whose New Service Requests were evaluated in the Facilities Study, along with (to the extent consistent with Transmission Provider's confidentiality obligations in Section 18.17 of the Operating Agreement) all related work papers. Transmission Provider also shall post on its website the existence of the Facilities Study. New Service Customer acknowledges and consents to such other, additional disclosures of information as may be required under the PJM Tariff or the FERC's rules and regulations.
11. New Service Customer acknowledges that, consistent with Part VI of the PJM Tariff, the affected Transmission Owner(s) will participate in the Facilities Study process and that Transmission Provider may disseminate information to the affected Transmission Owner(s) and may consult with them regarding part or all of the Facilities Study.

COST RESPONSIBILITY

12.
 - A. New Service Customer shall reimburse Transmission Provider for all, or for an allocated portion of, the actual cost of the Facilities Study in accordance with its cost responsibility as determined under Section 206 of the PJM Tariff.
 - B. Prior to initiating the Facilities Study, Transmission Provider shall bill New Service Customer for New Service Customer's share of the cost of work on the study that is scheduled to be completed during the first three months after work commences. Thereafter, on or before the 5th business day of every third month, Transmission Provider shall bill New Service Customer for New Service Customer's share of the cost of work expected to be completed on the Facilities Study during the ensuing three months. New Service Customer shall pay each bill within twenty (20) days after receipt thereof. In the event New Service Customer fails, other than as provided below regarding billing disputes, to make timely payment of any invoice for work on the Facilities Study, its New Service Request shall be deemed to be terminated and withdrawn as of the date when payment was due. Notwithstanding the foregoing, in the event that the total estimated cost of the Facilities Study does not exceed the amount of the deposit required under Section 206 of the PJM Tariff, Transmission Provider shall apply the deposit in payment of the invoices for the cost of the Facilities Study. Upon written request by the New Service Customer pursuant to Section 206.4.1.1 of the PJM Tariff, Transmission Provider may provide a quarterly cost reconciliation. Subject to the following sentence regarding the final cost reconciliation upon completion of the Facility Study, such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work. Within 120 days after Transmission Provider completes the Facilities Study, Transmission Provider shall provide a final invoice presenting an accounting of, and the

appropriate party shall make any payment to the other that is necessary to resolve, any difference between (a) New Service Customer's cost responsibility under this Agreement and the PJM Tariff for the actual cost of the Facilities Study and (b) New Service Customer's aggregate payments hereunder, including its deposits.

C. In the event of a billing dispute, Transmission Provider shall continue to perform its obligations under this Agreement so long as (1) New Service Customer continues to make all payments not in dispute, and (2) New Service Customer's aggregate deposits held by Transmission Provider under this Agreement while the dispute is pending exceeds the amount in dispute, or (3) New Service Customer pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If New Service Customer fails to meet any of these requirements, then its New Service Request shall be deemed to be terminated and withdrawn as of the date when payment was due.

13. Concurrent with execution of this Agreement, New Service Customer will pay Transmission Provider a cash deposit, as provided by Section 206 of the PJM Tariff, equal to the greater of \$100,000 or New Service Customer's estimated cost responsibility for the first three months of work on the Facilities Study. Notwithstanding the foregoing, an Interconnection Customer with a proposed Customer Facility that is: (a) equal to or less than 20 MW but greater than 2 MW shall pay a refundable deposit in the amount of \$50,000; or (b) equal to or less than 2 MW shall pay a refundable deposit in the amount of \$15,000. New Service Customer's quarterly estimated cost responsibility shall equal its estimated cost responsibility for the work on the Facilities Study that is scheduled to be completed during each three-month period after such work commences. If New Service Customer fails timely to provide the deposit required by this section, its New Service Request shall be deemed terminated and withdrawn and this Agreement shall be null and void. New Service Customer acknowledges that it may become obligated to pay one or more additional deposits pursuant to sections 14 and 15 below. Except as otherwise provided in section 12.B above, Transmission Provider shall continue to hold the amounts on deposit under this agreement until settlement of the final invoice.
14. If the Facilities Study, as described in section 7.A of this Agreement, is to include evaluation of more than one New Service Request and one or more of those requests is terminated and withdrawn, subject to the terms of section 15 of this Agreement, Transmission Provider will redetermine and reallocate the costs of the Facilities Study among the remaining participating New Service Customers in accord with Section 206 of the PJM Tariff. In that event, and subject to the terms of section 15, within 30 days after the date for execution and return of Facilities Study Agreements as determined under Section 206 of the PJM Tariff, Transmission Provider will provide the New Service Customer with a written statement of the New Service Customer's revised responsibility for the estimated cost of the Facilities Study, determined in accordance with Section 206 of the PJM Tariff. In the event that New Service Customer's revised cost responsibility exceeds the sum of its previous deposits for the Facilities Study, it shall deliver to Transmission Provider, within 10 days after New Service Customer's receipt of its revised cost responsibility, an additional cash deposit equal to the amount of the excess.

If New Service Customer fails timely to provide an additional deposit that is required under this section, its New Service Request shall be deemed terminated and withdrawn as of the date by which its additional deposit was due. In the event that New Service Customer's revised cost responsibility under the notice described in this section is less than the sum of its previous deposits for the Facilities Study, Transmission Provider shall return to New Service Customer, with its notice of the revised cost responsibility, the amount of the difference.

15. A. This section shall apply prior to commencement of the Facilities Study (1) if the Facilities Study is to include multiple New Service Requests; and (2) if, in Transmission Provider's reasonable judgment, the termination and withdrawal of one or more of those New Service Requests significantly changes the group of New Service Requests to be included in the Facilities Study from the group that was included in the System Impact Study. For the purposes of this section, a change to the group of New Service Requests to be included in the Facilities Study shall be significant if, in Transmission Provider's reasonable engineering judgment, the change is likely to cause the system constraints relating to, and/or the facilities and upgrades necessary to accommodate, the group of New Service Requests remaining to be included in the Facilities Study to differ materially from the system constraints relating to, and/or from the facilities and upgrades necessary to accommodate, the group of New Service Requests that the System Impact Study evaluated.

B. In the event of a significant change to the group of New Service Requests that the System Impact Study evaluated, within 15 days after the date for execution and return of Facilities Study Agreements as determined under Section 206 of the PJM Tariff, Transmission Provider shall provide New Service Customer with an explanation of the nature and extent of the change in the affected group of New Service Requests and of the extent to which Transmission Provider has determined that it must re-assess the results of the System Impact Study. Within 30 days after it provides the explanation described in the preceding sentence, Transmission Provider shall provide New Service Customer with a revised estimate of the time needed, and of the likely cost, to complete the Facilities Study, and, if the study continues to include evaluation of more than one New Service Customer's New Service Request(s), New Service Customer's allocated share of the estimated cost of the revised Facilities Study, determined in accord with Section 206 of the PJM Tariff.

C. In the event that New Service Customer's revised cost responsibility exceeds the sum of its previous deposits for the Facilities Study, it shall deliver to Transmission Provider, within 10 days after New Service Customer's receipt of its revised cost responsibility, an additional cash deposit equal to the amount of the excess. If New Service Customer fails timely to provide an additional deposit that is required under this section, its New Service Request shall be deemed terminated and withdrawn as of the date by which its additional deposit was due. In the event that New Service Customer's revised cost responsibility under the notice described in this section is less than the sum of its previous deposits for the Facilities Study, Transmission Provider shall return to

New Service Customer, with its notice of the revised cost responsibility, the amount of the difference.

16. A. If the Facilities Study includes New Service Customer's New Service Request(s) only, New Service Customer may terminate its participation in the study at any time by providing written notice of termination to Transmission Provider. New Service Customer's notice of termination (1) shall be effective as of the end of the business day following the day that Transmission Provider receives such notice and (2) concurrently shall have the effect of terminating and withdrawing New Service Customer's New Service Request(s). New Service Customer will be responsible for all costs of the Facilities Study that Transmission Provider incurred prior to the effective date of the notice of termination. Within thirty (30) days after the effective date of New Service Customer's notice of termination, Transmission Provider will deliver to New Service Customer a statement of New Service Customer's responsibility for the costs of the Facilities Study incurred up to the date of termination. In the event that New Service Customer's cost responsibility as of the date of termination exceeds the sum of its deposits then held by Transmission Provider for the Facilities Study, Transmission Provider's statement will include an invoice in the amount of such excess. New Service Customer will pay that invoice within ten (10) days after it receives it. In the event that New Service Customer does not pay the invoice within ten (10) days after receipt, New Service Customer shall owe the invoice amount plus interest at the applicable rate prescribed in 18 C.F.R. § 35.19a (a)(2)(iii), accrued from the day after the date payment was due until the date of payment. In the event that New Service Customer's cost responsibility as of the date of termination was less than the sum of its deposits for the Facilities Study, Transmission Provider's statement will include a payment to New Service Customer in the amount of the difference.
- B. If the Facilities Study includes any New Service Request(s) other than that (those) of New Service Customer, termination and withdrawal of New Service Customer's New Service Request(s) at any time after Transmission Provider has commenced the Facilities Study will not alter New Service Customer's responsibility for the costs of the Facilities Study under this Agreement and the PJM Tariff.

DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

17. In analyzing and preparing the Facilities Study, Transmission Provider, the Transmission Owners, and any other subcontractors employed by Transmission Provider shall have to rely on information provided by New Service Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNERS, NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY,

CONTENT, OR CONCLUSIONS OF THE FACILITIES STUDY. New Service Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

18. In no event will Transmission Provider, the Transmission Owners or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Facilities Study Agreement or the Facilities Study, even if Transmission Provider, the Transmission Owners, or other subcontractors employed by Transmission Provider have been advised of the possibility of such a loss. Nor shall Transmission Provider, the Transmission Owners, or other subcontractors employed by Transmission Provider be liable for any delay in delivery, or for the non-performance or delay in performance, of Transmission Provider's obligations under this Agreement.

Without limitation of the foregoing, New Service Customer further agrees that the Transmission Owners and other subcontractors employed by Transmission Provider to prepare or assist in the preparation of any Facilities Study shall be deemed third party beneficiaries of this provision entitled "Disclaimer of Warranty/Limitation of Liability."

MISCELLANEOUS

19. Any notice or request made to or by either party regarding this Facilities Study Agreement shall be made to the representative of the other party as indicated below.

Transmission Provider

PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403

New Service Customer

20. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
21. This Agreement or any part thereof, may not be amended, modified, assigned or waived other than by a writing signed by all parties hereto.
22. This Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.

23. Neither this Agreement nor the Facilities Study performed hereunder shall be construed as an application for service under Part II or Part III of the PJM Tariff.
24. The provisions of Part VI of the PJM Tariff are incorporated herein and made a part hereof.
25. Capitalized terms used but not otherwise defined herein shall have the meaning ascribed to them in the PJM Tariff.
26. This Facilities Study Agreement shall become effective on the date it is executed by all parties and shall remain in effect until the earlier of (a) the date on which the Transmission Provider tenders the completed Facilities Study and, as applicable, a proposed Interconnection Service Agreement or Upgrade Construction Service Agreement to New Service Customer pursuant to Section 212 or Section 213, respectively, of the PJM Tariff, or (b) termination and withdrawal of the New Service Request(s) to which the Facilities Study hereunder relates.
27. **No Third-Party Beneficiaries**
This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the parties, and the obligations herein assumed are solely for the use and benefit of the parties, their successors in interest and where permitted, their assigns.
28. **Multiple Counterparts**
This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
29. **No Partnership**
This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the parties or to impose any partnership obligation or partnership liability upon either party. Neither party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other party.
30. **Severability**
If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the parties shall negotiate in good faith to restore insofar as practicable the benefits to each party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.
31. **Governing Law, Regulatory Authority, and Rules**
For Interconnection Requests, the validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of

_____ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

32. **Reservation of Rights**

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each party shall have the right to protest any such filing by the other party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the parties otherwise agree as provided herein.

IN WITNESS WHEREOF, Transmission Provider and the New Service Customer have caused this Facilities Study Agreement to be executed by their respective authorized officials.

Transmission Provider: PJM Interconnection, L.L.C.

By: _____
Name Title Date

Printed Name

New Service Customer: [Name of Party]

By: _____
Name Title Date

Printed Name

Schedule A
Details of Design and Cost Estimates/Quality
For the Facilities Study

[insert details regarding degree of accuracy of cost estimates and associated scope of design as mutually agreed by Transmission Provider and New Service Customer]

ATTACHMENT N-3

FORM OF

OPTIONAL INTERCONNECTION STUDY AGREEMENT

(PJM Queue Position #___)

THIS AGREEMENT is made and entered into this ___ day of _____, 20__ by and between _____, a _____ organized and existing under the laws of the State of _____, (“Interconnection Customer”) and _____, a _____ existing under the laws of the State of _____, (“Transmission Provider”). Interconnection Customer and Transmission Provider each may be referred to as a “Party,” or collectively as the “Parties”.

RECITALS

WHEREAS, Interconnection Customer is proposing to develop or expand a generating facility or Merchant Transmission Facilities consistent with the Interconnection Request submitted by the Interconnection Customer dated _____ and designated as project [Queue Position].

WHEREAS, Interconnection Customer is proposing to establish an interconnection with the Transmission System; and

WHEREAS, Interconnection Customer has submitted to Transmission Provider an Interconnection Request; and

WHEREAS, on or after the date when the Interconnection Customer receives the System Impact Study results, Interconnection Customer has further requested that the Transmission Provider prepare an Optional Interconnection Study;

NOW THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

1. when used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the PJM Interconnection L.L.C. Open Access Transmission Tariff (“Tariff”).
2. Interconnection Customer elects and Transmission Provider shall cause an Optional Interconnection Study consistent with Section 209 of the Tariff to be performed in accordance with the Tariff.
3. The scope of the Optional Interconnection Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
4. The Optional Interconnection Study shall be performed solely for informational purposes.

5. The Optional Interconnection Study report shall provide a sensitivity analysis based on the assumptions specified by the Interconnection Customer in Attachment A to this Agreement. The Optional Interconnection Study will identify the Attachment Facilities, Local Upgrade and Network Upgrades, and the estimated cost thereof, that may be required to provide Interconnection Service based upon the assumptions specified by the Interconnection Customer in Attachment A.
6. The Interconnection Customer shall provide an initial deposit of \$10,000 for the performance of the Optional Interconnection Study. The Transmission Provider's good faith estimate for the time of completion of the Optional Interconnection Study is [insert date]. Within 45 days after Transmission Provider completes the Optional Interconnection Study, Transmission Provider shall provide an accounting of, and the appropriate party shall make any payment to the other that is necessary to resolve, any difference between (a) Interconnection Customer's cost responsibility under this Agreement and the PJM Tariff for the actual cost of the Optional Interconnection Study and (b) Interconnection Customer's aggregate payments hereunder, including its deposits.

Upon delivery of the Optional Interconnection Study, the Transmission Provider shall charge and the Interconnection Customer shall pay the actual costs of the Optional Study.

DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

7. In analyzing and preparing the Optional Study, Transmission Provider, the Transmission Owners, and any other subcontractors employed by Transmission Provider shall have to rely on information provided by Interconnection Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNERS, NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE OPTIONAL INTERCONNECTION STUDY. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.
8. In no event will Transmission Provider, the Transmission Owners or other subcontractors employed by Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Optional Interconnection Study Agreement or the Optional Interconnection Study, even if Transmission Provider, the Transmission Owners, or other subcontractors employed by Transmission Provider have been advised of the possibility of such a loss. Nor shall Transmission Provider, the Transmission Owners, or other

subcontractors employed by Transmission Provider be liable for any delay in delivery, or for the non-performance or delay in performance, of Transmission Provider's obligations under this Agreement.

Without limitation of the foregoing, Interconnection Customer further agrees that the Transmission Owners and other subcontractors employed by Transmission Provider to prepare or assist in the preparation of any Optional Interconnection Study shall be deemed third party beneficiaries of this section 8.

MISCELLANEOUS

- 9. Any notice or request made to or by either party regarding this Optional Interconnection Study Agreement shall be made to the representative of the other party as indicated below.

Transmission Provider

PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403

Interconnection Customer

- 10. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 11. This Agreement or any part thereof, may not be amended, modified, assigned or waived other than by a writing signed by all parties hereto.
- 12. This Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.
- 13. Neither this Agreement nor the Optional Interconnection Study performed hereunder shall be construed as an application for service under Part II or Part III of the PJM Tariff.
- 14. The provisions of Part VI of the PJM Tariff are incorporated herein and made a part hereof.
- 15. This Optional Interconnection Study Agreement shall become effective on the date it is executed by all parties and shall remain in effect until the earlier of (a) completion and final payment for the Optional Interconnection Study or (b) termination and withdrawal

of the Interconnection Request(s) to which the Optional Interconnection Study hereunder relates.

16. **Governing Law, Regulatory Authority, and Rules**

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of _____ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

17. **No Third-Party Beneficiaries**

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

18. **Multiple Counterparts**

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

19. **No Partnership**

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

20. **Severability**

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

21. **Reservation of Rights**

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in

which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

IN WITNESS WHEREOF, Transmission Provider and the Interconnection Customer have caused this Optional Interconnection Study Agreement to be executed by their respective authorized officials.

Transmission Provider: PJM Interconnection, L.L.C.

By: _____
Name Title Date

Printed Name

Interconnection Customer: [Name of Party]

By: _____
Name Title Date

Printed Name

**FORM OF
INTERCONNECTION SERVICE AGREEMENT**

**By and Among
PJM Interconnection, L.L.C.**

**And
[Name of Interconnection Customer]**

**And
[Name of Interconnected Transmission Owner]
(PJM Queue Position #__)**

- 1.0 Parties. This Interconnection Service Agreement (“ISA”) including the Specifications, Schedules and Appendices attached hereto and incorporated herein, is entered into by and between PJM Interconnection, L.L.C., the Regional Transmission Organization for the PJM Region (hereinafter “Transmission Provider” or “PJM”), _____ (“Interconnection Customer” [OPTIONAL: or “[short name]”]) and _____ (“Interconnected Transmission Owner” [OPTIONAL: or “[short name]”]). All capitalized terms herein shall have the meanings set forth in the appended definitions of such terms as stated in Part I of the PJM Open Access Transmission Tariff (“Tariff”). [Use as/when applicable: This ISA supersedes the _____ {insert details to identify the agreement being superseded, such as whether it is an Interim Interconnection Service Agreement, Interconnection Service Agreement, or Interconnection Agreement, the effective date of the agreement, the service agreement number designation, and the FERC docket number, if applicable, for the agreement being superseded.}]]
- 2.0 Authority. This ISA is entered into pursuant to Part VI of the Tariff. Interconnection Customer has requested an Interconnection Service Agreement under the Tariff, and Transmission Provider has determined that Interconnection Customer is eligible under the Tariff to obtain this ISA. The standard terms and conditions for interconnection as set forth in Appendix 2 to this ISA are hereby specifically incorporated as provisions of this ISA. Transmission Provider, Interconnected Transmission Owner and Interconnection Customer agree to and assume all of the rights and obligations of the Transmission Provider, Interconnected Transmission Owner and Interconnection Customer, respectively, as set forth in Appendix 2 to this ISA.
- 3.0 Customer Facility Specifications. Attached are Specifications for the Customer Facility that Interconnection Customer proposes to interconnect with the Transmission System. Interconnection Customer represents and warrants that, upon completion of construction of such facilities, it will own or control the Customer Facility identified in section 1.0 of the Specifications attached hereto and made a part hereof. In the event that Interconnection Customer will not own the Customer Facility, Interconnection Customer represents and warrants that it is authorized by the owner(s) thereof to enter into this ISA and to represent such control.
- 4.0 Effective Date. Subject to any necessary regulatory acceptance, this ISA shall become effective on the date it is executed by all Interconnection Parties, or, if the agreement is

filed with FERC unexecuted, upon the date specified by FERC. This ISA shall terminate on such date as mutually agreed upon by the parties, unless earlier terminated in accordance with the terms set forth in Appendix 2 to this ISA. The term of the ISA shall be as provided in Section 1.3 of Appendix 2 to this ISA. Interconnection Service shall commence as provided in Section 1.2 of Appendix 2 to this ISA.

- 5.0 Security. In accord with Section 212.4 of the Tariff, Interconnection Customer shall provide the Transmission Provider (for the benefit of the Interconnected Transmission Owner) with a letter of credit from an agreed provider or other form of security reasonably acceptable to the Transmission Provider and that names the Transmission Provider as beneficiary (“Security”) in the amount of \$_____. This amount represents the sum of the estimated Costs, determined in accordance with Sections 212 and 217 of the Tariff, for which the Interconnection Customer will be responsible, less any Costs already paid by Interconnection Customer. Interconnection Customer acknowledges that its ultimate cost responsibility in accordance with Section 217 of the Tariff will be based upon the actual Costs of the facilities described in the Specifications, whether greater or lesser than the amount of the payment security provided under this section.

[Include the following if Interconnection Customer requests deferral of the security as provided for in Section 212.4(c) of the Tariff:

For any portion of the security that may be deferred in accordance with Section 212.4(c) of the Tariff, and as requested by Interconnection Customer, Interconnection Customer shall provide the security specified in this Section 5.0 within 120 days after the Interconnection Customer executes this ISA, provided that Interconnection Customer shall pay a deposit of at least \$200,000 or 125% of the estimated costs that will be incurred during the 120-day period, whichever is greater, to fund continued design work and/or procurement activities, with \$100,000 of such deposit being non-refundable.]

Should Interconnection Customer fail to provide security at the time the Interconnection Customer executes this ISA, or, if deferred, by the end of the 120-day period, this ISA shall be terminated.

- 6.0 Project Specific Milestones. In addition to the milestones stated in Section 212.5 of the Tariff, as applicable, during the term of this ISA, Interconnection Customer shall ensure that it meets each of the following development milestones:

[Specify Project Specific Milestones]

[As appropriate include the following standard Milestones, with any revisions necessary for the project at hand:

- 6.1 Substantial Site work completed. On or before _____ Interconnection Customer must demonstrate completion of at least 20% of project site construction. At this time, Interconnection Customer must submit to Interconnected Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Customer Interconnection Facilities.
- 6.2 Delivery of major electrical equipment. On or before _____, Interconnection Customer must demonstrate that ___ generating units have been delivered to Interconnection Customer's project site.
- 6.3 Commercial Operation. (i) On or before _____, Interconnection Customer must demonstrate commercial operation of ___ generating units; (ii) On or before _____, Interconnection Customer must demonstrate commercial operation of ___ additional generating units. Demonstrating commercial operation includes achieving Initial Operation in accordance with Section 1.4 of Appendix 2 to this ISA and making commercial sales or use of energy, as well as, if applicable, obtaining capacity qualification in accordance with the requirements of the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

[if a specific situation requires a CSA by a certain date then use the following: Interconnection Construction Service Agreement. On or before _____, Interconnection Customer must have either (a) executed an Interconnection Construction Service Agreement for Interconnection Facilities for which Interconnection Customer has cost responsibility; (b) requested dispute resolution under Section 12 of the PJM Tariff, or if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement; or (c) requested that the Transmission Provider file the Interconnection Construction Service Agreement unexecuted with the Commission.]

- 6.4 Within one (1) month following commercial operation of generating unit(s), Interconnection Customer must provide certified documentation demonstrating that "as-built" Customer Facility and Customer Interconnection Facilities are in accordance with applicable PJM studies and agreements. Interconnection Customer must also provide PJM with "as-built" electrical modeling data or confirm that previously submitted data remains valid.

[Add Additional Project Specific Milestones as appropriate]

Interconnection Customer shall demonstrate the occurrence of each of the foregoing milestones to Transmission Provider's reasonable satisfaction. Transmission Provider may reasonably extend any such milestone dates, in the event of delays that Interconnection Customer (i) did not cause and (ii) could not have remedied through the exercise of due diligence. The milestone dates stated in this ISA shall be deemed to be extended coextensively with any suspension of work initiated by Interconnection Customer in accordance with the Interconnection Construction Service Agreement.

- 7.0 Provision of Interconnection Service. Transmission Provider and Interconnected Transmission Owner agree to provide for the interconnection to the Transmission System in the PJM Region of Interconnection Customer's Customer Facility identified in the Specifications in accordance with Part IV and Part VI of the Tariff, the Operating Agreement of PJM Interconnection, L.L.C. ("Operating Agreement"), and this ISA, as they may be amended from time to time.
- 8.0 Assumption of Tariff Obligations. Interconnection Customer agrees to abide by all rules and procedures pertaining to generation and transmission in the PJM Region, including but not limited to the rules and procedures concerning the dispatch of generation or scheduling transmission set forth in the Tariff, the Operating Agreement and the PJM Manuals.
- 9.0 Facilities Study. In analyzing and preparing the [Facilities Study] [System Impact Study {if a Facilities Study was not required}], and in designing and constructing the Attachment Facilities, Local Upgrades and/or Network Upgrades described in the Specifications attached to this ISA, Transmission Provider, the Interconnected Transmission Owner(s), and any other subcontractors employed by Transmission Provider have had to, and shall have to, rely on information provided by Interconnection Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER TRANSMISSION PROVIDER, THE INTERCONNECTED TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY TRANSMISSION PROVIDER OR INTERCONNECTED TRANSMISSION OWNER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE FACILITIES STUDY OR THE SYSTEM IMPACT STUDY IF A FACILITIES STUDY WAS NOT REQUIRED OR OF THE ATTACHMENT FACILITIES, THE LOCAL UPGRADES AND/OR THE NETWORK UPGRADES, PROVIDED, HOWEVER, that Transmission Provider warrants that the Transmission Owner Interconnection Facilities and any Merchant Transmission Upgrades described in the Specifications will be designed and constructed (to the extent that Interconnected Transmission Owner is responsible for design and construction thereof) and operated in accordance with Good Utility Practice, as such term is defined in the Operating Agreement. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.
- 10.0 Construction of Transmission Owner Interconnection Facilities
- 10.1. Cost Responsibility. Interconnection Customer shall be responsible for and shall pay upon demand all Costs associated with the interconnection of the Customer Facility as specified in the Tariff. These Costs may include, but are not limited to,

an Attachment Facilities charge, a Local Upgrades charge, a Network Upgrades charge and other charges. A description of the facilities required and an estimate of the Costs of these facilities are included in Sections 3.0 and 4.0 of the Specifications to this ISA.

10.2. Billing and Payments. Transmission Provider shall bill the Interconnection Customer for the Costs associated with the facilities contemplated by this ISA, estimates of which are set forth in the Specifications to this ISA, and the Interconnection Customer shall pay such Costs, in accordance with Section 11 of Appendix 2 to this ISA and the applicable Interconnection Construction Service Agreement. Upon receipt of each of Interconnection Customer's payments of such bills, Transmission Provider shall reimburse the applicable Interconnected Transmission Owner. Pursuant to Section 212.4 of the Tariff, Interconnection Customer requests that Transmission Provider provide a quarterly cost reconciliation:

_____ Yes

_____ No

10.3. Contract Option. In the event that the Interconnection Customer and Interconnected Transmission Owner agree to utilize the Negotiated Contract Option provided by the Interconnection Construction Service Agreement to establish, subject to FERC acceptance, non-standard terms regarding cost responsibility, payment, billing and/or financing, the terms of Sections 10.1 and/or 10.2 of this Section 10.0 shall be superseded to the extent required to conform to such negotiated terms, as stated in a schedule attached to the parties' Interconnection Construction Service Agreement relating to interconnection of the Customer Facility.

10.4 In the event that the Interconnection Customer elects to construct some or all of the Transmission Owner Interconnection Facilities under the Option to Build of the Interconnection Construction Service Agreement, billing and payment for the Costs associated with the facilities contemplated by this ISA shall relate only to such portion of the Interconnection Facilities as the Interconnected Transmission Owner is responsible for building.

11.0 Interconnection Specifications

11.1 Point of Interconnection. The Point of Interconnection shall be as identified on the one-line diagram attached as Schedule B to this ISA.

11.2 List and Ownership of Interconnection Facilities. The Interconnection Facilities to be constructed and ownership of the components thereof are identified in Section 3.0 of the Specifications attached to this ISA.

11.3 Ownership and Location of Metering Equipment. The Metering Equipment to be constructed, the capability of the Metering Equipment to be constructed, and the ownership thereof, are identified on the attached Schedule C to this ISA.

11.4 Applicable Technical Standards. The Applicable Technical Requirements and Standards that apply to the Customer Facility and the Interconnection Facilities are identified in Schedule D to this ISA.

12.0 Power Factor Requirement.

Consistent with Section 4.7 of Appendix 2 to this ISA, the power factor requirement is as follows:

[For Generation Interconnection Customers]

{The following language should be included for new large and small synchronous generation facilities that will have the Tariff specified power factor. This section does not apply if the Interconnection Request is for an incremental increase in generating capability.}

The Interconnection Customer shall design its Customer Facility with the ability to maintain a power factor of at least 0.95 leading to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

{For all wind or non-synchronous generation facilities which have entered the New Services Queue prior to May 1, 2015, include the appropriate alternative from the language below. This section does not apply if the Interconnection Request is for an incremental increase in generating capability.}

The result of the System Impact Study indicated that, for the safety and reliability of the Transmission System, no power factor requirement is required for the [wind-powered] [non-synchronous] Customer Facility.

{or}

The results of the System Impact Study require that, for the safety or reliability of the Transmission System, the Generation Interconnection Customer shall design its [wind-powered] [non-synchronous] Customer Facility with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the Point of Interconnection.

{include the following language if the Interconnection Request is for an incremental increase in capacity or energy output to a synchronized generation facility}

The existing __ MW portion of the Customer Facility shall retain its existing ability to maintain a power factor of at least 0.95 leading to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

The increase of ___ MW to the Customer Facility associated with this ISA shall be designed with the ability to maintain a power factor of at least 1.0 (unity) to 0.90 lagging measured at the [generator's terminals] [Point of Interconnection].

{For new wind or non-synchronous generation facilities which have entered the New Service Queue on or after May 1, 2015, and before November 1, 2016, the following applies:}

The Generation Interconnection Customer shall design its [wind-powered] [non-synchronous] Customer Facility with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the generator's terminals.

{For new wind or non-synchronous generation facilities which have entered the New Service Queue after November 1, 2016, the following applies:}

The Generation Interconnection Customer shall design its [wind-powered] [non-synchronous] Customer Facility with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

{For all wind or non-synchronous generation facilities that have entered the New Services Queue prior to May 1, 2015, include the appropriate alternative from the language below for Interconnection Requests for an incremental increase in capacity or energy output to all wind or non-synchronized generation facility.}

The results of the System Impact Study indicate that, for the safety or reliability of the Transmission System, no power factor requirement is necessary for the [existing ___ MW or the increase of ___ MW associated with this ISA] [increase of ___ MW associated with this ISA, but that the existing ___ MW of the Customer Facility must retain its ability to retain a power factor of at least 0.95 leading to 0.95 lagging measured at the Point of Interconnection] [existing ___ MW of the Customer Facility but that the increase of ___ MW associated with this ISA must be designed with the ability to maintain a power factor requirement of 1.0 (unity) to 0.90 lagging measured at the Point of Interconnection].

{or}

The results of the System Impact Study indicate that, for the safety or reliability of the Transmission System, (i) the existing ___ MW portion of the Customer Facility shall retain its existing ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the Point of Interconnection and (ii) the increase of ___ MW to the Customer Facility associated with this ISA shall be designed with the ability to maintain a power factor of at least 1.0 (unity) to 0.95 lagging measured at the Point of Interconnection.

{For all wind or non-synchronous generation facilities requesting an incremental increase in capacity or energy output which have entered the New Services Queue on or after May 1, 2015, and before November 1, 2016, include the following requirements: }

{NOTE: This section does not apply to requests for an incremental increase in capacity or energy output for wind or non-synchronous generation facilities which were commercially operable or had entered the New Services Queue prior to May 1, 2015.}

The existing [wind-powered] [non-synchronous] __ MW portion of the Customer Facility shall retain the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the generator's terminals.

The increase of __ MW to the [wind-powered] [non-synchronous] Customer Facility associated with this ISA shall be designed with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the generator's terminals.

{For all wind or non-synchronous generation facilities requesting an incremental increase in capacity or energy output which have entered the New Services Queue after November 1, 2016, and were not commercially operable prior to November 1, 2016 include the following requirements: }

The existing [wind-powered] [non-synchronous] __ MW portion of the Customer Facility shall retain the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

The increase of __ MW to the [wind-powered] [non-synchronous] Customer Facility associated with this ISA shall be designed with the ability to maintain a power factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

{For all wind or non-synchronous generation facilities requesting an incremental increase in capacity or energy output which have entered the New Services Queue on or after November 1, 2016, and were commercially operable prior to November 1, 2016, include the following requirements: }

The result of the System Impact Study indicated that, for the safety and reliability of the Transmission System, no power factor requirement is required for the [wind-powered] [non-synchronous] Customer Facility.

{or}

The results of the System Impact Study require that, for the safety or reliability of the Transmission System, the Generation Interconnection Customer shall design its [wind-powered] [non-synchronous] Customer Facility with the ability to maintain a power

factor of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers.

[For Transmission Interconnection Customers]

{The following language should be included only for new Merchant Transmission Facilities }

Transmission Interconnection Customer shall design its Merchant D.C. Transmission Facilities and/ or Controllable A.C. Merchant Transmission Facilities, to maintain a power factor at the Point of Interconnection of at least 0.95 leading and 0.95 lagging, when such Customer Facility is operating at any level within its approved operating range.

[Include section 12A.0 only when applicable, i.e., only for a facility for which Transmission Provider and Interconnected Transmission Owner deem an RTU (or equivalent) to be unnecessary]

- 12A.0 RTU. In accordance with Section 8.5.2 of Appendix 2 to this ISA, that provision's requirement for installation of a remote terminal unit or equivalent data collection and transfer equipment is hereby waived for purposes of this ISA.
- 13.0 Charges. In accordance with Sections 10 and 11 of Appendix 2 to this ISA, the Interconnection Customer shall pay to the Transmission Provider the charges applicable after Initial Operation, as set forth in Schedule E to this ISA. Promptly after receipt of such payments, the Transmission Provider shall forward such payments to the appropriate Interconnected Transmission Owner.
- 14.0 Third Party Beneficiaries. No third party beneficiary rights are created under this ISA, except, however, that, subject to modification of the payment terms stated in Section 10 of this ISA pursuant to the Negotiated Contract Option, payment obligations imposed on Interconnection Customer under this ISA are agreed and acknowledged to be for the benefit of the Interconnected Transmission Owner(s). Interconnection Customer expressly agrees that the Interconnected Transmission Owner(s) shall be entitled to take such legal recourse as it deems appropriate against Interconnection Customer for the payment of any Costs or charges authorized under this ISA or the Tariff with respect to Interconnection Service for which Interconnection Customer fails, in whole or in part, to pay as provided in this ISA, the Tariff and/or the Operating Agreement.
- 15.0 Waiver. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this ISA shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 16.0 Amendment. This ISA or any part thereof, may not be amended, modified, or waived other than by a written document signed by all parties hereto.

- 17.0 Construction With Other Parts Of The Tariff. This ISA shall not be construed as an application for service under Part II or Part III of the Tariff.
- 18.0 Notices. Any notice or request made by either party regarding this ISA shall be made, in accordance with the terms of Appendix 2 to this ISA, to the representatives of the other party and as applicable, to the Interconnected Transmission Owner(s), as indicated below:

Transmission Provider:

PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403

Interconnection Customer:

Interconnected Transmission Owner:

- 19.0 Incorporation Of Other Documents. All portions of the Tariff and the Operating Agreement pertinent to the subject matter of this ISA and not otherwise made a part hereof are hereby incorporated herein and made a part hereof.
- 20.0 Addendum of Non-Standard Terms and Conditions for Interconnection Service. Subject to FERC approval, the parties agree that the terms and conditions set forth in Schedule F hereto are hereby incorporated herein by reference and be made a part of this ISA. In the event of any conflict between a provision of Schedule F that FERC has accepted and any provision of Appendix 2 to this ISA that relates to the same subject matter, the pertinent provision of Schedule F shall control.
- 21.0 Addendum of Interconnection Customer's Agreement to Conform with IRS Safe Harbor Provisions for Non-Taxable Status. To the extent required, in accordance with Section 24.1 of Appendix 2 to this ISA, Schedule G to this ISA shall set forth the Interconnection Customer's agreement to conform with the IRS safe harbor provisions for non-taxable status.
- 22.0 Addendum of Interconnection Requirements for all Wind or Non-synchronous Generation Facilities. To the extent required, Schedule H to this ISA sets forth interconnection requirements for a wind or non-synchronous generation facilities and is hereby incorporated by reference and made a part of this ISA.

23.0 All interconnection parties agree to comply with all infrastructure security requirements of the North American Electric Reliability Corporation.

IN WITNESS WHEREOF, Transmission Provider, Interconnection Customer and Interconnected Transmission Owner have caused this ISA to be executed by their respective authorized officials.

(PJM Queue Position #____)

Transmission Provider: **PJM Interconnection, L.L.C.**

By: _____
Name Title Date

Printed name of signer: _____

Interconnection Customer: **[Name of Party]**

By: _____
Name Title Date

Printed name of signer: _____

Interconnected Transmission Owner: **[Name of Party]**

By: _____
Name Title Date

Printed name of signer: _____

**SPECIFICATIONS FOR
INTERCONNECTION SERVICE AGREEMENT**

**By and Among
PJM INTERCONNECTION, L.L.C.**

And

_____ [Name of Interconnection Customer]

And

_____ [Name of Interconnected Transmission Owner]

(PJM Queue Position # ____)

1.0 Description of [generating unit(s)] [Merchant Transmission Facilities] (the Customer Facility) to be interconnected with the Transmission System in the PJM Region:

a. Name of Customer Facility:

b. Location of Customer Facility:

c. Size in megawatts of Customer Facility:

{The following language should be included only for generating units

For Generation Interconnection Customer:

Maximum Facility Output of _____MW }

{The following language applies when a Generation Interconnection Request involves an increase of the capacity of an existing generating facility:

The stated size of the generating unit includes an increase in the Maximum Facility Output of the generating unit of __ MW over Interconnection Customer's previous interconnection. This increase is a result of the Interconnection Request associated with this Interconnection Service Agreement. }

{The following language should be included only for Merchant Transmission Facilities

For Transmission Interconnection Customer:

Nominal Rated Capability: _____MW }

d. Description of the equipment configuration:

2.0 Rights

[for Generation Interconnection Customers]

2.1 Capacity Interconnection Rights: {this section will not apply if the Customer Facility is exclusively an Energy Resource and thus is granted no CIRs; see alternate section 2.1 below }

Pursuant to and subject to the applicable terms of the Tariff, the Interconnection Customer shall have Capacity Interconnection Rights at the Point(s) of Interconnection specified in this Interconnection Service Agreement in the amount of ___ MW. {Instructions: this number is the total of the Capacity Interconnection Rights that are granted as a result of the Interconnection Request, plus any prior Capacity Interconnection Rights }

{include the following language when the projected Initial Operation is in advance of the study year used for the System Impact Study and Capacity Interconnection Rights are only interim until the study year: }

Pursuant to and subject to the applicable terms of the Tariff, the Interconnection Customer shall have Capacity Interconnection Rights at the Point(s) of Interconnection specified in this Interconnection Service Agreement in the amount of ___MW commencing _____. During the time period from the effective date of this ISA until _____ (the “interim time period”), the Interconnection Customer may be awarded interim Capacity Interconnection Rights in the amount not to exceed _____MW. The availability and amount of such interim Capacity Interconnection Rights shall be dependent upon completion and the results of an interim deliverability study. Any interim Capacity Interconnection Rights awarded during the interim time period shall terminate on _____.

{include the following language to the extent applicable for interconnection of additional generation at an existing generating facility: }

The amount of Capacity Interconnection Rights specified above (____ MW) includes ____ MW of Capacity Interconnection Rights that the Interconnection Customer had at the same Point(s) of Interconnection prior to its Interconnection Request associated with this Interconnection Service Agreement, and ____MW of Capacity Interconnection Rights granted as a result of such Interconnection Request.

{include the following language when the CIRs are only interim and have a termination date or event:}

Interconnection Customer shall have ____ MW of Capacity Interconnection Rights for the time period from ____ to _____. These Capacity Interconnection Rights are interim and will terminate upon {explain circumstances -- e.g. interim agreement; completion of another facility, etc.}

2.1a To the extent that any portion of the Customer Facility described in section 1.0 is not a Capacity Resource with Capacity Interconnection Rights, such portion of the Customer Facility shall be an Energy Resource. PJM reserves the right to limit total injections to the Maximum Facility Output in the event reliability would be affected by output greater than such quantity.

{this version of section 2.1 will be used in lieu of section 2.1 above when a generating facility will be an Energy Resource and therefore will not be granted any CIRs:}

[2.1 The generating unit(s) described in section 1.0 shall be an Energy Resource. Pursuant to this Interconnection Service Agreement, the generating unit will be permitted to inject ____ MW (nominal) into the system. PJM reserves the right to limit injections to this quantity in the event reliability would be affected by output greater than such quantity.]

[for Transmission Interconnection Customers]

2.1 Transmission Injection Rights: [applicable only to Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with a control area outside PJM]

Pursuant to Section 232 of the Tariff, Interconnection Customer shall have Transmission Injection Rights at each indicated Point of Interconnection in the following quantity(ies):

2.2 Transmission Withdrawal Rights: [applicable only to Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that interconnect with a control area outside PJM]

Pursuant to Section 232 of the Tariff, Interconnection Customer shall have Transmission Withdrawal Rights at each indicated Point of Interconnection in the following quantity(ies):

[Include Section 2.2A only if customer is interconnecting Controllable A.C. Merchant Transmission Facilities]

2.2A Interconnection Customer is interconnecting Controllable A.C. Merchant Transmission Facilities as defined in the appended Section 1.6B of the Tariff, and has elected, pursuant to the appended Section 41.1 of the Tariff, to receive Transmission Injection Rights and Transmission Withdrawal Rights in lieu of the other applicable rights for which it may be eligible under Subpart C of Part VI of the Tariff. Accordingly, Interconnection Customer hereby agrees that the Transmission Injection Rights and Transmission Withdrawal Rights awarded to it pursuant to the Tariff and this ISA are, and throughout the duration of this ISA shall be, conditioned on Interconnection Customer's continuous operation of its Controllable A.C. Merchant Transmission Facilities in a controllable manner, i.e., in a manner effectively the same as operation of D.C. transmission facilities.

2.3 Incremental Deliverability Rights:

Pursuant to Section 235 of the Tariff, Interconnection Customer shall have Incremental Deliverability Rights at each indicated Point of Interconnection in the following quantity(ies):

2.4 Incremental Available Transfer Capability Revenue Rights:

Pursuant to Section 233 of the Tariff, Interconnection Customer shall have Incremental Available Transfer Capability Revenue Rights at each indicated Point of Interconnection in the following quantities:

2.5 Incremental Auction Revenue Rights:

Pursuant to Section 231 of the Tariff, Interconnection Customer shall have Incremental Auction Revenue Rights in the following quantities:

2.6 Incremental Capacity Transfer Rights:

Pursuant to Section 234 of the Tariff, Interconnection Customer shall have Incremental Capacity Transfer Rights between the following associated source(s) and sink(s) in the indicated quantities:

3.0 Construction Responsibility and Ownership of Interconnection Facilities

a. Interconnection Customer.

(1) Interconnection Customer shall construct and, unless otherwise indicated, shall own, the following Interconnection Facilities:

[Specify Facilities To Be Constructed]

(2) In the event that, in accordance with the Interconnection Construction Service Agreement, Interconnection Customer has exercised the Option to Build, it is hereby permitted to build in accordance with and subject to the conditions and limitations set forth in that Section, the following portions of the Transmission Owner Interconnection Facilities which constitute or are part of the Customer Facility:

[Specify Facilities To Be Constructed]

Ownership of the facilities built by Interconnection Customer pursuant to the Option to Build shall be as provided in the Interconnection Construction Service Agreement.

- b. Interconnected Transmission Owner {or Name of Interconnected Transmission Owner if more than one Interconnected Transmission Owner }

[Specify Facilities To Be Constructed and Owned]

- c. [if applicable, include the following][Name of any additional Transmission Owner constructing facilities with which Interconnection Customer and Transmission Provider will also execute an Interconnection Construction Service Agreement]

[Specify Facilities To Be Constructed and Owned]

4.0 Subject to modification pursuant to the Negotiated Contract Option and/or the Option to Build under the Interconnection Construction Service Agreement, Interconnection Customer shall be subject to the estimated charges detailed below, which shall be billed and paid in accordance with Appendix 2, Section 11 of this ISA and the applicable Interconnection Construction Service Agreement.

4.1 Attachment Facilities Charge: \$_____

[Optional: Provide Charge and Identify Interconnected Transmission Owner]

4.2 Network Upgrades Charge: \$_____

[Optional: Provide Breakdown of Charge Based on Interconnected Transmission Owner responsibilities]

4.3 Local Upgrades Charge: \$_____

[Optional: Provide Breakdown of Charge Based on Interconnected Transmission Owner responsibilities]

4.4 Other Charges: \$_____

[Optional: Provide Breakdown of Charge Based on Interconnected Transmission Owner responsibilities]

4.5 Cost breakdown:

\$ Direct Labor
\$ Direct Material
\$ Indirect Labor
\$ Indirect Material

[Additional items for breakdown as necessary]

\$ Total

4.6 Security Amount Breakdown:

\$ Estimated Cost of Non-Direct Connection Local Upgrades and/or Non-Direct Connection Network Upgrades

plus \$ Estimated cost of the work (for the first three months after construction commences in earnest) on the required Attachment Facilities, Direct Connection Local Upgrades, and Direct Connection Network Upgrades

plus \$ Option to Build Security for Attachment Facilities, Direct Connection Local Upgrades, and Direct Connection Network Upgrades (including Cancellation Costs)

{Use if Interconnected Transmission Owner work will be completed in the first quarter:

\$ Costs included for three-month work completion estimate Security x 0.25}

\$ Total Security required with ISA (this value should be in Section 5.0 of this ISA)

less \$ Costs already paid by Interconnection Customer

\$ Total Security **{if the resultant is negative, use:** reduction with this ISA;
if the resultant is zero or positive use: required with this ISA }

APPENDICES:

- **APPENDIX 1 - DEFINITIONS**
- **APPENDIX 2 - STANDARD TERMS AND CONDITIONS FOR INTERCONNECTIONS**

SCHEDULES:

- **SCHEDULE A - CUSTOMER FACILITY LOCATION/SITE PLAN**
- **SCHEDULE B - SINGLE-LINE DIAGRAM**
- **SCHEDULE C - LIST OF METERING EQUIPMENT**
- **SCHEDULE D - APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS**
- **SCHEDULE E - SCHEDULE OF CHARGES**
- **SCHEDULE F - SCHEDULE OF NON-STANDARD TERMS & CONDITIONS**
- **SCHEDULE G - INTERCONNECTION CUSTOMER'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS**
- **SCHEDULE H - INTERCONNECTION REQUIREMENTS FOR A WIND GENERATION FACILITY**

4.4 Transmission Interconnection Customer Obligations:

A Transmission Interconnection Customer that will be a Merchant Transmission Provider is subject to the terms and conditions in Tariff, Section 38.

4.8 Under- and Over-Frequency and Under- and Over- Voltage Conditions:

The Generation Interconnection Customer shall ensure “frequency ride through” capability and “voltage ride through” capability of its Customer Facility. The Generation Interconnection Customer shall enable these capabilities such that its Customer Facility shall not disconnect automatically or instantaneously from the system or equipment of the Transmission Provider and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition, as tested pursuant to Section 1.4.4 of Appendix 2 of this Interconnection Service Agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the PJM Region on a comparable basis. The Customer Facility’s protective equipment settings shall comply with the Transmission Provider’s automatic load-shed program. The Transmission Provider shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term “ride through” as used herein shall mean the ability of a Customer Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term “frequency ride through” as used herein shall mean the ability of a Generation Interconnection Customer’s Customer Facility to stay connected to and synchronized with the Transmission System or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the PJM Region on a comparable basis. The term “voltage ride through” as used herein shall mean the ability of a Customer Facility to stay connected to and synchronized with the system or equipment of the Transmission Provider and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the PJM Region on a comparable basis.

The Transmission System is designed to automatically activate a load-shed program as required by NERC and each Applicable Regional Entity in the event of an under-frequency system disturbance. A Generation Interconnection Customer shall implement under-frequency and over-frequency relay set points for the Customer Facility as required by NERC and each Applicable Regional Entity to ensure “frequency ride through” capability of the Transmission System. The response of a Generation Interconnection Customer’s Customer Facility to frequency deviations of predetermined magnitudes, both under-frequency and over-frequency deviations shall be studied and coordinated with the Transmission Provider in accordance with Good Utility Practice.

4.9 System Protection and Power Quality

4.9.1 System Protection:

Interconnection Customer shall, at its expense, install, operate and maintain such System Protection Facilities as may be required in connection with operation of the Customer Facility and the Customer Interconnection Facilities consistent with Applicable Technical Requirements and Standards. Interconnected Transmission Owner shall install any System Protection Facilities that may be required, as determined by Transmission Provider, on the Transmission Owner Interconnection Facilities or the Transmission System in connection with the operation of the Customer Facility and the Customer Interconnection Facilities. Responsibility for the cost of any System Protection Facilities required on the Transmission Owner Interconnection Facilities or the Transmission System shall be allocated as provided in Section 217 of the Tariff.

4.9.2 Power Quality:

The Customer Facility and Customer Interconnection Facilities shall not cause excessive deviations from the power quality criteria set forth in the Applicable Technical Requirements and Standards.

11.2 Costs for Transmission Owner Interconnection Facilities:

The following provisions shall apply with respect to charges for the Costs of the Interconnected Transmission Owner for which the Interconnection Customer is responsible.

11.2.1 Adjustments to Security:

The Security provided by Interconnection Customer at or before execution of the Interconnection Service Agreement (a) shall be reduced as portions of the work are completed, and/or (b) shall be increased or decreased as required to reflect adjustments to Interconnection Customer's cost responsibility, as determined in accordance with Section 217, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals.

11.2.2 Invoice:

The Interconnected Transmission Owner shall provide Transmission Provider a quarterly statement of the Interconnected Transmission Owner's scheduled expenditures during the next three months for, as applicable (a) the design, engineering and construction of, and/or for other charges related to, construction of the Interconnection Facilities for which the Interconnected Transmission Owner is responsible under the Interconnection Service Agreement and the Interconnection Construction Service Agreement, or (b) in the event that the Interconnection Customer exercises the Option to Build pursuant to Section 3.2.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P to the Tariff), for the Transmission Owner's Costs associated with the Interconnection Customer's building Attachment Facilities, Local Upgrades, and Network Upgrades (including both Direct Connection Network Upgrades, Direct Connection Local Upgrades, Non-Direct Connection Network Upgrades and Non-Direct Connection Local Upgrades), including but not limited to Costs for tie-in work and Cancellation Costs. Provided, however, such Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Transmission Owner when engaging in oversight activities to satisfy itself that the Interconnection Customer is complying with the Transmission Owner's standards and specifications for the construction of facilities) only if the Transmission Owner and the Interconnection Customer mutually agree to the inclusion of such costs under the Option to Build pursuant to the provisions of Section 3.3.3.1 of Appendix 2 of the form of Interconnection Construction Service Agreement (set forth in Attachment P to the Tariff). Transmission Provider shall bill Interconnection Customer on behalf of the Interconnected Transmission Owner, for the Interconnected Transmission Owner's expected Costs during the subsequent three months. Interconnection Customer shall pay each bill within twenty (20) days after receipt thereof. Upon receipt of each of Interconnection Customer's payments of such bills, Transmission Provider shall reimburse the Interconnected Transmission Owner. Interconnection Customer may request that the Transmission Provider provide a quarterly cost reconciliation. Such a quarterly cost reconciliation will have a one-quarter lag, e.g., reconciliation of costs for the first calendar quarter of work will be provided at the start of the third calendar quarter of work, provided, however, that Section 11.2.3 of this Appendix 2 shall govern the timing of the final cost reconciliation upon completion of the work.

11.2.3 Final Invoice:

Within 120 days after the Interconnected Transmission Owner completes construction and installation of the Interconnection Facilities for which the Interconnected Transmission Owner is responsible under the Interconnection Service Agreement and the Interconnection Construction Service Agreement, Transmission Provider shall provide Interconnection Customer with an accounting of, and the appropriate Construction Party shall make any payment to the other that is necessary to resolve, any difference between (a) Interconnection Customer's responsibility under the Tariff for the actual Cost of such facilities, and (b) Interconnection Customer's previous aggregate payments to Transmission Provider for the Costs of such facilities. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment to either the Interconnection Customer or the Interconnected Transmission Owner that the preceding sentence requires it to make unless and until the Transmission Provider has received the payment that it is required to refund from the Construction Party owing the payment.

11.2.4 Disputes:

In the event of a billing dispute between any of the Construction Parties, Transmission Provider and the Interconnected Transmission Owner shall continue to perform their respective obligations pursuant to this Interconnection Service Agreement and any related Interconnection Construction Service Agreements so long as (a) Interconnection Customer continues to make all payments not in dispute, and (b) the Security held by the Transmission Provider while the dispute is pending exceeds the amount in dispute, or (c) Interconnection Customer pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Interconnection Customer fails to meet any of these requirements, then Transmission Provider shall so inform the other Construction Parties and Transmission Provider or the Interconnected Transmission Owner may provide notice to Interconnection Customer of a Breach pursuant to Section 15 of this Appendix 2.

13.1 Required Coverages For Generation Resources Of More Than 20 Megawatts or Merchant Transmission Facilities:

Each Interconnected Entity shall maintain insurance as described in paragraphs (a) through (e) below. All insurance shall be procured from insurance companies rated "A-," VII or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities are located. Failure to maintain required insurance shall be a Breach of the Interconnection Service Agreement.

(a) Workers Compensation insurance with statutory limits, as required by the state and/or jurisdiction in which the work is to be performed, and employer's liability insurance with limits of not less than one million dollars (\$1,000,000).

(b) Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising, products and completed operations coverage, independent contractors coverage, liability assumed under an insured contract, coverage for pollution to the extent normally available and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) products and completed operations aggregate.

(c) Business/Commercial Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of one million dollars (\$1,000,000) each accident for bodily injury, including death, and property damage.

(d) Excess and/or Umbrella Liability Insurance with a limit of liability of not less than twenty million dollars (\$20,000,000) per occurrence. These limits apply in excess of the employer's liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or via a combination of primary, excess and/or umbrella insurance.

(e) Professional Liability Insurance providing errors, omissions and/or malpractice coverage in the amount of five million dollars (\$5,000,000) per occurrence/aggregate. Coverage shall be provided for the Interconnected Entity's duties, responsibilities and performance outlined in this Appendix 2, the Interconnection Service Agreement, and if applicable, the Interconnection Construction Service Agreement.

An Interconnected Entity may meet the Professional Liability Insurance requirements by requiring third-party contractors, designers, or engineers, or other parties that are responsible for design work associated with the transmission facilities or Interconnection Facilities necessary for the interconnection to procure professional liability insurance in the amounts and upon the terms prescribed by this section 13.1(e), and providing evidence of such insurance to the other Interconnected Entity. Such insurance shall be procured from companies rated "A-," VII or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities are located. Nothing in this section relieves the Interconnected Entity from complying

with the insurance requirements. In the event that the policies of the designers, engineers, or other parties used to satisfy the Interconnected Entity's insurance obligations under this section become invalid for any reason, including but not limited to, (i) the policy(ies) lapsing or otherwise terminating or expiring; (ii) the coverage limits of such policy(ies) are decreased; or (iii) the policy(ies) do not comply with the terms and conditions of the Tariff; Interconnected Entity shall be required to procure insurance sufficient to meet the requirements of this section, such that there is no lapse in insurance coverage. Notwithstanding the foregoing, in the event an Interconnected Entity will not design or construct or cause to design or construct any new transmission facilities or Interconnection Facilities, Transmission Provider, in its discretion, may waive the requirement that an Interconnected Entity maintain the Professional Liability Insurance pursuant to this section.

13.1A. Required Coverages For Generation Resources Of 20 Megawatts Or Less:

Each Interconnected Entity shall maintain the types of insurance as described in section 13.1 paragraphs (a) through (e) in an amount sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. Additional insurance may be required by the Interconnection Customer, as a function of owning and operating a generating facility. All insurance shall be procured from insurance companies rated "A-" VII or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities are located. Failure to maintain required insurance shall be a Breach of the Interconnection Service Agreement.

SCHEDULE D

APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS

[Reference the appropriate PJM and TO technical standards]

2.3 Construction By Interconnection Customer

2.3.1 Construction Prior to Execution of Interconnection Construction Service Agreement:

If the Interconnection Customer procures materials for, and/or commences construction of, the Customer Interconnection Facilities, any Transmission Owner Interconnection Facilities that it has elected to construct by exercising the Option to Build under Section 3.2.3 of this Appendix 2, or for any subsequent modification thereto, prior to the execution of the Interconnection Construction Service Agreement or, if the Interconnection Construction Service Agreement has been executed, before the Interconnected Transmission Owner and Transmission Provider have accepted the Interconnection Customer's initial design, or any subsequent modification to the design, of such Interconnection Facilities, such procurement and/or construction shall be at the Interconnection Customer's sole risk, cost and expense.

2.3.2 Monitoring and Inspection:

The Interconnected Transmission Owner may monitor construction and installation of Interconnection Facilities that the Interconnection Customer is constructing. Upon reasonable notice, authorized personnel of the Interconnected Transmission Owner may inspect any or all of such Interconnection Facilities to assess their conformity with Applicable Standards.

2.3.3 Notice of Completion:

The Interconnection Customer shall notify the Transmission Provider and the Interconnected Transmission Owner in writing when it has completed construction of (i) the Customer Facility; (ii) the Customer Interconnection Facilities; and (iii) any Transmission Owner Interconnection Facilities for which it has exercised the Option to Build under Section 3 of this Appendix 2.

3.4 Suspension:

The following provision applies to Interconnection Requests which have entered the New Services Queue prior to February 1, 2011:

Interconnection Customer shall have the right, upon written notice to Transmission Provider and Interconnected Transmission Owner, to suspend at any time all work by Interconnected Transmission Owner associated with the construction and installation of the Transmission Owner Interconnection Facilities required under an Interconnection Service Agreement or Interconnection Construction Service Agreement, with the condition that, notwithstanding such suspension, the Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Provider's safety and reliability criteria. This suspension right permits the Interconnection Customer to request one or more suspensions of work for a cumulative period of up to three years. Interconnection Customer's notice of suspension shall include an estimated duration of the suspension and other information related to the suspension.

The following provision applies to Interconnection Requests which have entered the New Services Queue on or after February 1, 2011:

Interconnection Customer shall have the right, upon written notice to Transmission Provider and Interconnected Transmission Owner, to suspend at any time all work by Interconnected Transmission Owner associated with the construction and installation of the Transmission Owner Interconnection Facilities required under an Interconnection Service Agreement or Interconnection Construction Service Agreement, with the condition that, notwithstanding such suspension, the Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Provider's safety and reliability criteria. This suspension right permits the Interconnection Customer to request one or more suspensions of work for a cumulative period of up to (i) three years if the Transmission Provider determines that such suspension would not be deemed a Material Modification, or (ii) one year if the Transmission Provider determines that such suspension would be deemed a Material Modification. Interconnection Customer's notice of suspension shall include an estimated duration of the suspension and other information related to the suspension.

3.4.1 Costs:

In the event of a suspension under this section, Interconnection Customer shall be responsible for all reasonable and necessary Cancellation Costs which Interconnected Transmission Owner or Transmission Provider (i) has incurred pursuant to the Interconnection Service Agreement or Interconnection Construction Service Agreement prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and/or labor contracts which Interconnected Transmission Owner or Transmission Provider cannot reasonably avoid; provided, however, that prior to cancelling or suspending any such material, equipment or labor contract, Interconnected

Transmission Owner or Transmission Provider, as the case may be, shall obtain Interconnection Customer's authorization to do so. Transmission Provider shall invoice Interconnection Customer pursuant to Section 9 of this Appendix 2 for Cancellation Costs for which the customer is liable under this section. Interconnected Transmission Owner and Transmission Provider shall use due diligence to minimize Cancellation Costs in the event of a suspension of work.

3.4.2 Duration of Suspension:

In the event Interconnection Customer suspends work by Interconnected Transmission Owner required under an Interconnection Service Agreement or Interconnection Construction Service Agreement pursuant to this Section 3.4, and has not requested Transmission Provider and the Interconnected Transmission Owner to recommence the work required under the applicable agreement(s) on or before the expiration of the time period allowed under this Section 3.4 following commencement of such suspension, the Interconnection Construction Service Agreement and the Interconnection Service Agreement for the Interconnection Request for which Interconnection Customer suspended work shall be deemed terminated as of the end of such suspension time period. The suspension time shall begin on the date the suspension is requested, or on the date of Interconnection Customer's written notice of suspension to Transmission Provider, if no effective date was specified.

9.1 Adjustments to Security:

The Security provided by Interconnection Customer at or before execution of the Interconnection Service Agreement (a) shall be reduced as portions of the work are completed, and/or (b) shall be increased or decreased as required to reflect adjustments to Interconnection Customer's cost responsibility, as determined in accordance with Section 217, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals.

11.1 Required Coverages For Generation Resources Of More Than 20 Megawatts or Merchant Transmission Facilities:

Each Constructing Entity shall maintain, at its own expense, insurance as described in paragraphs (a) through (e) below. All insurance shall be procured from insurance companies rated "A-," VII or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities will be located. Failure to maintain required insurance shall be a Breach of the Interconnection Construction Service Agreement.

(a) Workers Compensation Insurance with statutory limits, as required by the state and/or jurisdiction in which the work is to be performed, and employer's liability insurance with limits of not less than one million dollars (\$1,000,000).

(b) Commercial General Liability Insurance and/or Excess Liability Insurance covering liability arising out of premises, operations, personal injury, advertising, products and completed operations coverage, independent contractors coverage, liability assumed under an insured contract, coverage for pollution to the extent normally available and punitive damages to the extent allowable under applicable law, with limits of not less than one million dollars (\$1,000,000) per occurrence/one million dollars (\$1,000,000) general aggregate/one million dollars (\$1,000,000) products and completed operations aggregate.

(c) Business/Commercial Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of not less than one million dollars (\$1,000,000) each accident for bodily injury, including death, and property damage.

(d) Excess and/or Umbrella Liability Insurance with a limit of liability of twenty million dollars (\$20,000,000) per occurrence. These limits apply in excess of the employer's liability, commercial general liability and business/commercial automobile liability coverages described above. This requirement can be met alone or via a combination of primary, excess and/or umbrella insurance.

(e) Professional Liability, including Contractors Legal Liability, providing errors, omissions and/or malpractice coverage. Coverage shall be provided for the Constructing Entity's duties, responsibilities and performance outlined in this Interconnection Construction Service Agreement, with limits of liability as follows:

\$10,000,000 each occurrence
\$10,000,000 aggregate

An Interconnected Entity may meet the Professional Liability Insurance requirements by requiring third-party contractors, designers, or engineers, or other parties that are responsible for design work associated with the transmission facilities or Interconnection Facilities necessary for the interconnection to procure professional liability insurance in the amounts and upon the terms prescribed by this section 11.1(e), and providing evidence of such insurance to the other Interconnected Entity. Such insurance shall be procured from companies rated "A-," VII or

better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities are located. Nothing in this section relieves the Interconnected Entity from complying with the insurance requirements. In the event that the policies of the designers, engineers, or other parties used to satisfy the Interconnected Entity's insurance obligations under this section become invalid for any reason, including but not limited to, (i) the policy(ies) lapsing or otherwise terminating or expiring; (ii) the coverage limits of such policy(ies) are decreased; or (iii) the policy(ies) do not comply with the terms and conditions of the Tariff; Interconnected Entity shall be required to procure insurance sufficient to meet the requirements of this section, such that there is no lapse in insurance coverage. Notwithstanding the foregoing, in the event an Interconnected Entity will not design or construct or cause to design or construct any new transmission facilities or Interconnection Facilities, Transmission Provider, in its discretion, may waive the requirement that an Interconnected Entity maintain the Professional Liability Insurance pursuant to this section.

11.1A. Required Coverages For Generation Resources Of 20 Megawatts Or Less:

Each Constructing Entity shall maintain the types of insurance as described in section 11.1 paragraphs (a) through (e) above in an amount sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. Additional insurance may be required by the Interconnection Customer, as a function of owning and operating a generating facility. All insurance shall be procured from insurance companies rated "A-," VII or better by AM Best and authorized to do business in a state or states in which the Interconnection Facilities are located. Failure to maintain required insurance shall be a Breach of the Interconnection Construction Service Agreement.

11.5 Notices; Certificates of Insurance:

Prior to the commencement of work pursuant to this Agreement, the Constructing Entities agree to furnish each other Construction Party with certificates of insurance evidencing the insurance coverage obtained in accordance with this Section 11. All certificates of insurance shall indicate that the certificate holder is included as an additional insured under the Commercial General Liability, Business/Commercial Automobile Liability and Excess and/or Umbrella Liability coverages, and that this insurance is primary with a waiver of subrogation in favor of the other Interconnected Entities. All policies of insurance shall provide for thirty days prior written notice of cancellation or material adverse change. If the policies of insurance do not or cannot be endorsed to provide thirty days prior written notice of cancellation or material adverse change, each Construction Entity shall provide the other Construction Entities with thirty days prior written notice of cancellation or material adverse change to any of the insurance required in this agreement.

SCHEDULE K

APPLICABLE TECHNICAL REQUIREMENTS AND STANDARDS

[Reference the appropriate PJM and TO technical standards]

ATTACHMENT S

**Form of
Transmission Interconnection Feasibility Study Agreement**

RECITALS

1. This Transmission Interconnection Feasibility Study Agreement, dated as of _____, is entered into, by and between _____ (“Interconnection Customer”) and PJM Interconnection, L.L.C. (“Transmission Provider”) pursuant to Part IV of the PJM Interconnection, L.L.C. Open Access Transmission Tariff (“PJM Tariff”). Capitalized terms used in this agreement, unless otherwise indicated, shall have the meanings ascribed to them in the PJM Tariff.

2. Pursuant to Section 36.1.03 of the PJM Tariff, the Interconnection Customer has submitted an Interconnection Request and has paid the applicable deposit to the Transmission Provider, for a proposed interconnection of Merchant Transmission Facilities.

3. Interconnection Customer requests interconnection to the Transmission System of Merchant Transmission Facilities with the following specifications.
 - a. Location of proposed facilities:

 - b. Substation(s) where Interconnection Customer proposes to interconnect or add its facilities:

 - c. Proposed voltage and nominal capability of new facilities or increase in capability of existing facilities:

 - d. Description of proposed facilities and equipment:

 - e. Planned date the proposed facilities or increase in capability will be in service:

 - f. Will the proposed facilities be Merchant A.C. or Merchant D.C. Transmission Facilities or Controllable A.C. Merchant Transmission Facilities?

A.C. _____ or D.C. _____ or Controllable A.C. _____

- i. If the proposed facilities will be Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities, does Interconnection Customer elect to receive:

EITHER

_____ (1) Firm or Non-Firm Transmission Injection Rights (TIR) and/or Firm or Non-Firm Transmission Withdrawal Rights (TWR).

OR

_____ (2) Incremental Deliverability Rights, Incremental Auction Revenue Rights and Incremental Available Transfer Capability Revenue Rights.

If Interconnection Customer elects (1) above, it must provide the following:

_____ Total project MW's to be evaluated as Firm (capacity) injection for TIR.

_____ Total project MW's to be evaluated as Non-firm (energy) injection for TIR.

_____ Total project MW's to be evaluated as Firm (capacity) withdrawal for TWR.

_____ Total project MW's to be evaluated a Non-firm (energy) withdrawal for TWR.

If Interconnection Customer elects (2) above, it must state the location on the Transmission System where it proposes to receive Incremental Deliverability Rights associated with Its proposed facilities:

- ii. If the proposed facilities will be Controllable A.C. Merchant Transmission Facilities, and provided that Interconnection Customer contractually binds itself in the Interconnection Service Agreement (“ISA”) related to its project always to operate its Controllable A.C. Merchant Transmission Facilities in a manner effectively the same as operation of D.C. transmission facilities, the ISA will provide Interconnection Customer with the same types of transmission rights that are available under the

Tariff for Merchant D.C. Transmission Facilities. For purposes of this Feasibility Study Agreement, Interconnection Customer represents that, should it execute an ISA for its project described herein, it will agree in the ISA to operate its facilities continuously in a controllable mode.

Interconnection Customer agrees? Yes _____ No _____

iii. If the proposed facilities will be Merchant A.C. Transmission Facilities without continuous controllability as described in paragraph 4.f.ii above, please specify the location on the Transmission System where Interconnection Customer proposes to receive any Incremental Deliverability Rights associated with its proposed facilities: _____

iv. Other information: _____

PURPOSE OF THE FEASIBILITY STUDY

4. Consistent with Section 36.2 of the PJM Tariff, the Transmission Provider shall conduct a Transmission Interconnection Feasibility Study to provide the Interconnection Customer with preliminary determinations of: (i) the type and scope of the Attachment Facilities, Local Upgrades, and/or Network Upgrades that will be necessary to accommodate the Interconnection Customer's Interconnection Request; (ii) the time that will be required to construct such facilities and upgrades; and (iii) the Interconnection Customer's cost responsibility for the necessary facilities and upgrades. In the event that the Transmission Provider is unable to complete the Transmission Interconnection Feasibility Study within the time period set forth in Tariff Section 36.2, the Transmission Provider shall notify the Interconnection Customer and explain the reasons for the delay.
5. The Transmission Interconnection Feasibility Study conducted hereunder will provide only preliminary non-final estimates of the cost and length of time required to accommodate the Interconnection Customer's Interconnection Request. More comprehensive estimates will be developed only upon execution of a System Impact Study Agreement and a Facilities Study Agreement in accordance with Part VI of the PJM Tariff. The Transmission Interconnection Feasibility Study necessarily will employ various assumptions regarding the Interconnection Request, other pending requests, and PJM's Regional Transmission Expansion Plan at the time of the study. The Transmission Interconnection Feasibility Study shall not obligate the Transmission Provider or the Transmission Owners to interconnect with the Interconnection Customer or construct any facilities or upgrades.

CONFIDENTIALITY

6. The Interconnection Customer agrees to provide all information requested by the Transmission Provider necessary to complete the Transmission Interconnection Feasibility Study. Subject to paragraph 7 of this Transmission Interconnection Feasibility Study Agreement and to the extent required by Section 222 of the PJM Tariff, information provided pursuant to this Section 6 shall be and remain confidential.
7. Until completion of the Transmission Interconnection Feasibility Study, the Transmission Provider shall keep confidential all information provided to it by the Interconnection Customer. Upon completion of the Transmission interconnection Feasibility Study, the study will be listed on the Transmission Provider's website and, to the extent required by Commission regulations, will be made publicly available upon request, except that the identity of the Interconnection Customer shall remain confidential and will not be posted on the Transmission Provider's website.
8. Interconnection Customer acknowledges that, consistent with Part IV and Part VI of the PJM Tariff, the Transmission Provider may contract with consultants, including the Transmission Owners, to provide services or expertise in the Transmission Interconnection Feasibility Study process and that the Transmission Provider may disseminate information to the Transmission Owners.

COST RESPONSIBILITY

9. The Interconnection Customer shall reimburse the Transmission Provider for the actual cost of the Transmission Interconnection Feasibility Study. The refundable portion of the deposit paid by the Interconnection Customer pursuant to Section 36.1.03 of the PJM Tariff shall be applied toward the Interconnection Customer's Transmission Interconnection Feasibility Study cost responsibility. Pursuant to Section 36.1.03, during the deficiency review of this Agreement, in the event that the Transmission Provider anticipates that the actual study costs will exceed the refundable portion of the deposit described in Section 36.1.03 of the PJM Tariff, 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. If the Transmission Provider sends the Interconnection Customer notification of estimated additional study costs during the deficiency review period (as described in Section 36.1.03), then the Interconnection Customer must either: (1) withdraw the Transmission Interconnection Request during the deficiency response period; or (2) pay all estimated additional study costs prior to the expiration of the deficiency response period. If the Interconnection Customer fails to complete either (1) or (2), then the Transmission Interconnection Request shall be deemed to be terminated and withdrawn. 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, the Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

10. In analyzing and preparing the Transmission Interconnection Feasibility Study, the Transmission Provider, the Transmission Owner(s), and any other subcontractors employed by the Transmission Provider shall have to rely on information provided by the Interconnection Customer and possibly by third parties and may not have control over the accuracy of such information. Accordingly, NEITHER THE TRANSMISSION PROVIDER, THE TRANSMISSION OWNER(S), NOR ANY OTHER SUBCONTRACTORS EMPLOYED BY THE TRANSMISSION PROVIDER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, WHETHER ARISING BY OPERATION OF LAW, COURSE OF PERFORMANCE OR DEALING, CUSTOM, USAGE IN THE TRADE OR PROFESSION, OR OTHERWISE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH REGARD TO THE ACCURACY, CONTENT, OR CONCLUSIONS OF THE FEASIBILITY STUDY. The Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder. Neither this Transmission Interconnection Feasibility Study Agreement nor the Transmission Interconnection Feasibility Study prepared hereunder is intended, nor shall either be interpreted, to constitute agreement by the Transmission Provider or the Transmission Owner(s) to provide any transmission or interconnection service to or on behalf of the Interconnection Customer either at this point in time or in the future.
11. In no event will the Transmission Provider, Transmission Owner(s) or other subcontractors employed by the Transmission Provider be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this Transmission Interconnection Feasibility Study Agreement or otherwise, even if the Transmission Provider, Transmission Owner(s), or other subcontractors employed by the Transmission Provider have been advised of the possibility of such a loss. Nor shall the Transmission Provider, Transmission Owner(s) or other subcontractors employed by the Transmission Provider be liable for any delay in delivery or of the non-performance or delay in performance of the Transmission Provider's obligations under this Transmission Interconnection Feasibility Study Agreement.

Without limitation of the foregoing, the Interconnection Customer further agrees that Transmission Owner(s) and other subcontractors employed by the Transmission Provider to prepare or assist in the preparation of any Transmission Interconnection Feasibility

Study shall be deemed third party beneficiaries of this provision entitled “Disclaimer of Warranty/Limitation of Liability.”

MISCELLANEOUS

- 12. Any notice or request made to or by either party regarding this Transmission Interconnection Feasibility Study Agreement shall be made to the representative of the other party as indicated below.

Transmission Provider
PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403

Interconnection Customer

- 13. No waiver by either party of one or more defaults by the other in performance of any of the provisions of this Transmission Interconnection Feasibility Study Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.
- 14. This Transmission Interconnection Feasibility Study Agreement or any part thereof, may not be amended, modified, or waived other than by a writing signed by all parties hereto.
- 15. This Transmission Interconnection Feasibility Study Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.
- 16. Neither this Transmission Interconnection Feasibility Study Agreement nor the Transmission Interconnection Feasibility Study performed hereunder shall be construed as an application for service under Part II or Part III of the PJM Tariff.
- 17. The provisions of the PJM Tariff are incorporated herein and made a part hereof.
- 18. **Governing Law, Regulatory Authority, and Rules**
The validity, interpretation and enforcement of this Transmission Interconnection Feasibility Study Agreement and each of its provisions shall be governed by the laws of the state of _____ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Transmission Interconnection Feasibility Study Agreement is subject to all Applicable Laws and Regulations. Each party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
- 19. **No Third-Party Beneficiaries**

This Transmission Interconnection Feasibility Study Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the parties, and the obligations herein assumed are solely for the use and benefit of the parties, their successors in interest and where permitted, their assigns.

20. Multiple Counterparts

This Transmission Interconnection Feasibility Study Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

21. No Partnership

This Transmission Interconnection Feasibility Study Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the parties or to impose any partnership obligation or partnership liability upon either party. Neither party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other party.

22. Severability

If any provision or portion of this Transmission Interconnection Feasibility Study Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the parties shall negotiate in good faith to restore insofar as practicable the benefits to each party that were affected by such ruling, and (3) the remainder of this Transmission Interconnection Feasibility Study Agreement shall remain in full force and effect.

23. Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Transmission Interconnection Feasibility Study Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Transmission Interconnection Feasibility Study Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each party shall have the right to protest any such filing by the other party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Transmission Interconnection Feasibility Study Agreement shall limit the rights of the parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the parties otherwise agree as provided herein.

IN WITNESS WHEREOF, the Transmission Provider and the Interconnection Customer have caused this Transmission Interconnection Feasibility Study Agreement to be executed by their respective authorized officials.

Transmission Provider

By: _____
Name Title Date

Interconnection Customer

By: _____
Name Title Date

Attachment Y

**Form of Screens Process Interconnection Request
(For Generation Facilities of 2 MW or less synchronous 5 MW or less inverter-based)**

1.0 Instructions

Interconnection Customer must submit the Screens Process Interconnection Request to Transmission Provider by hand delivery, mail, e-mail, or fax.

2.0 Processing Fee or Deposit:

Interconnection Customer is required to provide the Transmission Provider the applicable deposit. A portion of the deposit is non-refundable pursuant to Section 112A.

The base and initial per MW deposit received will be credited toward the amount of the Generation Interconnection Customer's cost responsibility pursuant to Section 112A.

3.0 Interconnection Customer Information

Legal Name of the Interconnection Customer (or, if an individual, individual's name)

Name: _____

Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Facility Location (if different from above): _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Alternative Contact Information (if different from the Interconnection Customer)

Contact Name: _____

Title: _____

Address: _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

4.0 Energy Resource Information

Will the Energy Resource be used for any of the following?

Net Metering? Yes ___ No ___

To Supply Power to the Interconnection Customer? Yes ___ No ___

To Supply Power to Others? Yes ___ No ___

For installations at locations with existing electric service to which the proposed Energy Resource will interconnect, provide:

(Local Electric Service Provider)

Contact Name: _____

Title: _____

Address: _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Requested Point of Interconnection: _____

Interconnection Customer's Requested In-Service Date: _____

Energy Source: ___ Solar ___ Wind ___ Hydro ___ Hydro Type (e.g. Run-of-River): _____
Diesel ___ Natural Gas ___ Fuel Oil ___ Other (state type) _____

Prime Mover: ___ Fuel Cell ___ Recip Engine ___ Gas Turb ___ Steam Turb
___ Microturbine ___ PV ___ Other

Type of Generator: ___ Synchronous ___ Induction ___ Inverter

Generator Nameplate Rating: _____ kW (Typical) Generator Nameplate kVAR: _____

Interconnection Customer or Customer-Site Load: _____ kW (if none, so state)

Typical Reactive Load (if known): _____

Maximum Physical Export Capability Requested: _____ kW

List components of the Small Energy Resource equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Is the prime mover compatible with the certified protective relay package? ___Yes ___No

Generator (or solar collector)

Manufacturer, Model Name & Number: _____

Version Number: _____

Nameplate Output Power Rating in kW: (Summer) _____ (Winter) _____

Nameplate Output Power Rating in kVA: (Summer) _____ (Winter) _____

Individual Generator Power Factor

Rated Power Factor: Leading: _____ Lagging: _____

Total Number of Generators in wind farm to be interconnected pursuant to this

Interconnection Request: _____ Elevation: _____ ___Single phase ___Three phase

Inverter Manufacturer, Model Name & Number (if used): _____

List of adjustable set points for the protective equipment or software: _____

Note: A completed Power Systems Load Flow data sheet must be supplied with the Interconnection Request.

5.0 Energy Resource Characteristic Data (for inverter-based machines)

Max design fault contribution current: _____ Instantaneous ___ or RMS? ___

Harmonics Characteristics: _____

Start-up requirements: _____

6.0 Energy Resource Characteristic Data (for rotating machines)

RPM Frequency: _____

(*) Neutral Grounding Resistor (If Applicable): _____

Synchronous Generators:

Direct Axis Synchronous Reactance, X_d : _____ P.U.

Direct Axis Transient Reactance, X'_d : _____ P.U.

Direct Axis Subtransient Reactance, X''_d : _____ P.U.

Negative Sequence Reactance, X_2 : _____ P.U.

Zero Sequence Reactance, X_0 : _____ P.U.

KVA Base: _____

Field Volts: _____

Field Amperes: _____

Induction Generators:

Motoring Power (kW): _____

I²t or K (Heating Time Constant): _____

Rotor Resistance, R_r : _____

Stator Resistance, R_s : _____

Stator Reactance, X_s : _____

Rotor Reactance, X_r : _____

Magnetizing Reactance, X_m : _____

Short Circuit Reactance, X_d'' : _____

Exciting Current: _____

Temperature Rise: _____

Frame Size: _____

Design Letter: _____

Reactive Power Required In Vars (No Load): _____

Reactive Power Required In Vars (Full Load): _____

Total Rotating Inertia, H: _____ Per Unit on kVA Base

Note: Please contact the Transmission Provider prior to submitting the Interconnection Request to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the appropriate regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

7.0 Interconnection Facilities Information

Will a transformer be used between the generator and the point of common coupling? Yes No

Will the transformer be provided by the Interconnection Customer? Yes No

Transformer Data (If Applicable, for Interconnection Customer-Owned Transformer):

Is the transformer: single phase three phase? Size: _____ kVA

Transformer Impedance: _____ % on _____ kVA Base

If Three Phase:

Transformer Primary: _____ Volts Delta Wye Wye Grounded

Transformer Secondary: _____ Volts Delta Wye Wye Grounded

Transformer Tertiary: _____ Volts Delta Wye Wye Grounded

Transformer Fuse Data (If Applicable, for Interconnection Customer-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: _____ Type: _____ Size: _____ Speed: _____

Interconnecting Circuit Breaker (if applicable):

Manufacturer: _____ Type: _____

Load Rating (Amps): _____ Interrupting Rating (Amps): _____ Trip Speed (Cycles): _____

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

	Setpoint Function	
	Minimum	Maximum
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Current Transformer Data (If Applicable):

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Potential Transformer Data (If Applicable):

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

8.0 Diagrams and Site Control Documentation

Enclose copy of site electrical one-line diagram showing the configuration of all Energy Resource equipment, current and potential circuits, and protection and control schemes. This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Energy Resource is larger than 50 kW. Is one-line diagram enclosed? ___Yes ___No

Enclose copy of any site documentation that indicates the precise physical location of the proposed Energy Resource (e.g., USGS topographic map or other diagram or documentation).

Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address) _____

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is available documentation enclosed? ___Yes ___No

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).
Are schematic drawings enclosed? ___Yes ___No

Provide demonstration of site control through an exclusive option to purchase the property on which the generation project is to be developed, a property deed, or a range of tax or corporate documents that identify property ownership. Site control must either be in the name of the party submitting the generation interconnection request or documentation must be provided establishing the business relationship between the project developer and the party having site control.

Interconnection Customer hereby certifies that, to the best of my knowledge, all the information provided in this Screens Process Interconnection Request is true and correct.

IN WITNESS WHEREOF, the Transmission Provider and the Interconnection Customer have caused this Screens Process Interconnection Request Agreement to be executed by their respective authorized officials.

Transmission Provider: **PJM Interconnection, L.L.C.**

By: _____
Name Title Date

Printed name of signer: _____

Interconnection Customer: **[Name of Party]**

By: _____
Name Title Date

Printed name of signer: _____

ATTACHMENT BB

**Form of Interconnection Service Agreement for
Certified Inverter-Based Generating Facility**

This Certified Inverter-Based Generating Facility Interconnection Service Agreement (“Agreement”) is entered into between PJM Interconnection, L.L.C. (“Transmission Provider”), _____ (“Interconnected Transmission Owner”), and _____ (“Interconnection Customer”).

1.0 Processing Fee

Concurrent with tendering this Agreement to Transmission Provider, Interconnection Customer shall pay a non-refundable processing fee of \$500.

2.0 Interconnection Customer

Name: _____

Contact Person: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Contact Information (if different from Interconnection Customer)

Name: _____

Contact Person: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

3.0 Small Inverter Facility Information

Location: _____

Electric Service Company: _____

Customer Account Number: _____

Inverter Manufacturer: _____ Model _____

Nameplate Rating: _____ (kW) _____ (kVA) _____ (AC Volts)

Single Phase _____ Three Phase _____

System Design Capacity: _____ (kW) _____ (kVA)

Prime Mover: Photovoltaic ____ Reciprocating Engine ____ Fuel Cell ____
Turbine ____ Other _____

Energy Source: Solar ____ Wind ____ Hydro ____ Diesel ____ Natural Gas ____
Fuel Oil ____ Other (describe) _____

Is the equipment UL1741 Listed? Yes ____ No ____
If Yes, attach manufacturer's cut-sheet showing UL1741 listing

Interconnection Customer or Customer-Site Load: _____ kW (zero, if none)

Maximum Physical Export Capability Requested: _____ kW

Estimated Installation Date: _____ Estimated In-Service Date: _____

Owner of the Small Inverter Facility _____ (include % ownership by any electric utility):

4.0 Certification of Small Inverter Facility

The Interconnection Customer represents and warrants that the Small Inverter Facility which is the subject of this Agreement is no larger than 10 kW and it meets the codes, standards, and certification requirements of Attachments Z and AA of the PJM Open Access Transmission Tariff ("Tariff"), or in lieu of such representation and warranty, the Transmission Provider has reviewed the design or tested the proposed Small Inverter Facility and is satisfied that it is safe to operate.

The following is a list of components of the Small Inverter Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

5.0 Authority and Incorporation of Tariff.

This Agreement is entered into pursuant to Part IV of the Tariff. Interconnection Customer has requested an Certified Inverter-Based Generating Facility Interconnection Service Agreement under the Tariff and Transmission Provider has determined that Interconnection Customer is eligible under the Tariff to obtain this Agreement. The standard terms and conditions for interconnection of Small Inverter Facilities as set forth in section 112B the Tariff as of the date of this Agreement are attached as Appendix A to this Agreement and are hereby specifically

incorporated as provisions of this Agreement. Transmission Provider, Interconnected Transmission Owner and Interconnection Customer agree to and assume all of the rights and obligations of the Transmission Provider, Interconnected Transmission Owner and Interconnection Customer, respectively, as set forth in the appended provisions of section 112B.

6.0 Effective Date.

This Agreement shall become effective on the date it is executed by the Transmission Provider and shall terminate on such date as mutually agreed upon by the parties,

7.0 Assumption of Tariff Obligations.

Interconnection Customer agrees to abide by all rules and procedures pertaining to generation and transmission in the PJM Region, including but not limited to the rules and procedures concerning the dispatch of generation or scheduling transmission set forth in the Tariff, the Operating Agreement and the PJM Manuals.

8.0 Waiver.

No waiver by either party of one or more defaults by the other in performance of any of the provisions of this Agreement shall operate or be construed as a waiver of any other or further default or defaults, whether of a like or different character.

9.0 Amendment.

This Agreement or any part thereof, may not be amended, modified, assigned, or waived other than by a writing signed by all parties hereto.

10. Critical Infrastructure.

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. All Transmission Providers, Interconnected Transmission Owner, market participants, and Interconnection Customers interconnected with electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.

11. PJM Queue Number

The PJM queue number associated with this Agreement is _____.

12. Site Control

Concurrent with tendering this Agreement to Transmission Provider, Interconnection Customer shall submit documentation of site control.

IN WITNESS WHEREOF, Transmission Provider, Interconnection Customer and Interconnected Transmission Owner have caused this Agreement to be executed by their respective authorized officials.

Transmission Provider: **PJM Interconnection, L.L.C.**

By: _____
Name Title Date

Printed name of signer: _____

Interconnection Customer: **[Name of Party]**

By: _____
Name Title Date

Printed name of signer: _____

Interconnected Transmission Owner: **[Name of Party]**

By: _____
Name Title Date

Printed name of signer: _____

ATTACHMENT CC

**Form of Certificate of Completion
(Small Generating Inverter Facility No Larger Than 10 kW)**

Is the Small Generating Inverter Facility owner-installed? Yes _____ No _____

Interconnection Customer: _____

Contact Person: _____

Address: _____

Location of the Small Generating Inverter Facility (if different from above):

City: _____ State: _____ Zip Code: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Electrician:

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

License number: _____

Date Approval to Install Small Inverter Facility granted by Transmission Provider:

PJM Queue Number:

Inspection:

The Small Generating Inverter Facility has been installed and inspected in compliance with the local building/electrical code of _____

Signed (Local electrical wiring inspector, or attach signed electrical inspection):

Print Name: _____

Date: _____

As a condition of interconnection, you are required to send/fax a copy of this form along with a copy of the signed electrical permit to (insert Transmission Provider information below):

Name: _____

Company: _____

Address: _____

City, State ZIP: _____

Fax: _____

Approval to Energize the Small Generating Inverter Facility (For Transmission Provider use only)

Energizing the Small Generating Inverter Facility is approved contingent upon the Terms and Conditions set forth in section 112B of the Tariff and the Interconnection Customer's Small Inverter ISA for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW.

Transmission Provider Signature

By: _____
Name Title Date

Printed name of signer: _____

6.0 Schedule Of Work.

6.1 Standard Option.

The Transmission Owner shall use Reasonable Efforts to design, engineer, procure, construct and install the Direct Assignment Facilities or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, in accordance with the Schedule and Scope of Work.

6.1.1 Negotiated Contract Option.

As an alternative to the Standard Option set forth in Section 6.1 of this Appendix III, the Transmission Owner and the New Service Customer may mutually agree to a Negotiated Contract Option for the Transmission Owner's design, procurement, construction and installation of the Customer-Funded Upgrades. Under the Negotiated Contract Option, the Upgrade Customer and the Transmission Owner may agree to terms different from those included in the Standard Option of Section 6.1 above and the corresponding standard terms set forth in the applicable provisions of Part VI of the Tariff and this Appendix III. Under the Negotiated Contract Option, negotiated terms may include the work schedule applicable to the Transmission Owner's construction activities and changes to same; payment provisions, including the schedule of payments; incentives, penalties and/or liquidated damages related to timely completion of construction; use of third party contractors; and responsibility for Costs, but only as between the Upgrade Customer and the Transmission Owner that are parties to this Upgrade CSA; no other New Service Customer's responsibility for Costs may be affected (Section 217 of the Tariff). No other terms of the Tariff or this Appendix III shall be subject to modification under the Negotiated Contract Option. The terms and conditions of the Tariff that may be negotiated pursuant to the Negotiated Contract Option shall not be affected by use of the Negotiated Contract Option except as and to the extent that they are modified by the parties' agreement pursuant to such option. All terms agreed upon pursuant to the Negotiated Contract Option shall be stated in full in an appendix to this Upgrade CSA.

6.2 Option to Build.

6.2.1 Option.

In the event that the New Service Customer and the affected Transmission Owner are unable to agree on terms for the construction of facilities required to accommodate the customer's New Service Request by such date as is reasonable in the light of the schedule for construction of such facilities, as set forth in the Facilities Study, or if mutually agreed by the New Service Customer and the affected Transmission Owner, the New Service Customer shall have the right, but not the obligation ("Option to Build"), to design, procure, construct and install all or any portion of the Direct Assignment Facilities and/or Customer-Funded Upgrades. In order to exercise this Option to Build, the New Service Customer must provide Transmission Provider and the Transmission Owner with written notice of its election to exercise the option and indicate its election to exercise the option in this Upgrade CSA.

6.2.2 General Conditions Applicable to Option.

In addition to the other terms and conditions applicable to the construction of facilities under this Appendix III, the Option to Build is subject to the following conditions:

(a) The New Service Customer must obtain or arrange to obtain all necessary permits and authorizations for the construction and installation of the Direct Assignment Facilities or Customer-Funded Upgrades that it is building, provided, however, that when the Transmission Owner's assistance is required, the Transmission Owner shall assist the New Service Customer in obtaining such necessary permits or authorizations with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring permits and authorizations for construction of facilities on its own behalf;

(b) The New Service Customer must obtain all necessary land rights for the construction and installation of the Direct Assignment Facilities or Customer-Funded Upgrades that it is building, provided, however, that upon New Service Customer's reasonable request, the Transmission Owner shall assist the New Service Customer in acquiring such land rights with efforts similar in nature and extent to those that the Transmission Owner typically undertakes in acquiring land rights for construction of facilities on its own behalf;

(c) Notwithstanding anything stated herein, each Transmission Owner shall have the exclusive right and obligation to perform the line attachments (tie-in work), and to calibrate remote terminal units and relay settings, required for the interconnection to such Transmission Owner's existing facilities of any Direct Assignment Facilities or Customer-Funded Upgrades that the New Service Customer builds; and

(d) The Direct Assignment Facilities or Customer-Funded Upgrades built by the New Service Customer shall be successfully inspected, tested and energized pursuant to Sections 19 and 20 of this Appendix III.

6.2.3 Additional Conditions Regarding Network Facilities.

To the extent that the New Service Customer utilizes the Option to Build for design, procurement, construction and/or installation of (a) any Merchant Network Upgrades, (b) Local Upgrades or Network Upgrades to Transmission System facilities that are in existence or under construction by or on behalf of the Transmission Owner on the date that the New Service Customer solicits bids under Section 6.2.7 below, or (c) Direct Assignment Facilities or Customer-Funded Upgrades that are to be located on land or in right-of-way owned or controlled by the Transmission Owner, and in addition to the other terms and conditions applicable to the design, procurement, construction and/or installation of facilities under this Appendix III, all work shall comply with the following further conditions:

(i) All work performed by or on behalf of the New Service Customer shall be conducted by contractors, and using equipment manufacturers or vendors, that are listed on the Transmission Owner's List of Approved Contractors;

(ii) The Transmission Owner shall have full site control of, and reasonable access to, its property at all times for purposes of tagging or operation, maintenance, repair or construction of modifications to, its existing facilities and/or for performing all tie-ins of Direct Assignment Facilities or Customer-Funded Upgrades built by or for the New Service Customer; and for acceptance testing of any equipment that will be owned and/or operated by the Transmission Owner;

(iii) The Transmission Owner shall have the right to have a reasonable number of appropriate representatives present for all work done on its property/facilities or regarding the Direct Assignment Facilities or Customer-Funded Upgrades, and the right to stop, or to order corrective measures with respect to, any such work that reasonably could be expected to have an adverse effect on reliability, safety or security of persons or of property of the Transmission Owner or any portion of the Transmission System, provided that, unless circumstances do not reasonably permit such consultations, the Transmission Owner shall consult with the New Service Customer and with Transmission Provider before directing that work be stopped or ordering any corrective measures;

(iv) The New Service Customer and its contractors, employees and agents shall comply with the Transmission Owner's safety, security and work rules, environmental guidelines and training requirements applicable to the area(s) where construction activity is occurring and shall provide all reasonably required documentation to the Transmission Owner, provided that the Transmission Owner previously has provided its safety, security and work rules and training requirements applicable to work on its facilities to Transmission Provider and the New Service Customer within 20 Business Days after a request therefore made by New Service Customer following its receipt of the Facilities Study;

(v) The New Service Customer shall be responsible for controlling the performance of its contractors, employees and agents; and

(vi) All activities performed by or on behalf of the New Service Customer pursuant to its exercise of the Option to Build shall be subject to compliance with Applicable Laws and Regulations, including those governing union staffing and bargaining unit obligations, and Applicable Standards.

6.2.4 Administration of Conditions.

To the extent that a Transmission Owner exercises any discretion in the application of any of the conditions stated in Sections 6.2.2 and 6.2.3 of this Appendix III, it shall apply each such condition in a manner that is reasonable and not unduly discriminatory and it shall not unreasonably withhold, condition, or delay any approval or authorization that the New Service Customer may require for the purpose of complying with any of those conditions.

6.2.5 Approved Contractors.

(a) Each Transmission Owner shall develop and shall provide to Transmission Provider a List of Approved Contractors. Each Transmission Owner shall include on its List of

Approved Contractors no fewer than three contractors and no fewer than three manufacturers or vendors of major transmission-related equipment, unless a Transmission Owner demonstrates to Transmission Provider's reasonable satisfaction that it is feasible only to include a lesser number of construction contractors, or manufacturers or vendors, on its List of Approved Contractors. Transmission Provider shall publish each Transmission Owner's List of Approved Contractors in a PJM Manual and shall make such manual available on its internet website.

(b) Upon request of a New Service Customer, a Transmission Owner shall add to its List of Approved Contractors (1) any design or construction contractor regarding which the New Service Customer provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate contractor is qualified to design, or to install and/or construct new facilities or upgrades or modifications to existing facilities on the Transmission Owner's system, or (2) any manufacturer or vendor of major transmission-related equipment (e.g., high-voltage transformers, transmission line, circuit breakers) regarding which the New Service Customer provides such information as the Transmission Owner may reasonably require which demonstrates to the Transmission Owner's reasonable satisfaction that the candidate entity's major transmission-related equipment is acceptable for installation and use on the Transmission Owner's system. No Transmission Owner shall unreasonably withhold, condition, or delay its acceptance of a contractor, manufacturer, or vendor proposed for addition to its List of Approved Contractors.

6.2.6 Construction by Multiple New Service Customers:

In the event that there are multiple New Service Customers that wish to exercise an Option to Build with respect to facilities of the types described in Section 6.2.3 to this Appendix III, the Transmission Provider shall determine how to allocate the construction responsibility among them unless they reach agreement among themselves on how to proceed.

6.2.7 Option Procedures

(a) Within 10 days after notifying Transmission Provider and the Transmission Owner of its election to exercise the Option to Build, New Service Customer shall solicit bids from one or more Approved Contractors named on the Transmission Owner's List of Approved Contractors to procure equipment for, and/or to design, construct and/or install, the Direct Assignment Facilities or Customer-Funded Upgrades that the New Service Customer seeks to build under the Option to Build on terms (i) that will meet the New Service Customer's proposed schedule; (ii) that, if the New Service Customer seeks to have an Approved Contractor construct or install Direct Assignment Facilities or Customer-Funded Upgrades, will satisfy all of the conditions on construction specified in Sections 6.2.2 and 6.2.3 of this Appendix III; and (iii) that will satisfy the obligations of a Constructing Entity (other than those relating to responsibility for the costs of facilities) under this Upgrade CSA.

(b) Any additional costs arising from the bidding process or from the final bid of the successful Approved Contractor shall be the sole responsibility of the New Service Customer.

(c) Upon receipt of a qualifying bid acceptable to it, the New Service Customer shall contract with the Approved Contractor that submitted the qualifying bid. Such contract shall meet the standards stated in paragraph (a) of this section.

(d) In the absence of a qualifying bid acceptable to the New Service Customer in response to its solicitation, the Transmission Owner(s) shall be responsible for the design, procurement, construction and installation of the Direct Assignment Facilities or Customer-Funded Upgrades in accordance with the Standard Option described in Section 6.2.1 of this Appendix III.

6.2.8 New Service Customer Drawings.

New Service Customer shall submit to the Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Direct Assignment Facilities or Customer-Funded Upgrades that New Service Customer arranges to build under the Option to Build. The Transmission Owner and Transmission Provider shall review the drawings to assess the consistency of New Service Customer's design of the pertinent Direct Assignment Facilities or Customer-Funded Upgrades with Applicable Standards and the Facilities Study. After consulting with the Transmission Owner, Transmission Provider shall provide comments on such drawings to New Service Customer within sixty days after its receipt thereof, after which time any drawings not subject to comment shall be deemed to be approved. All drawings provided hereunder shall be deemed to be Confidential Information.

6.2.9 Effect of Review.

Transmission Owner's and Transmission Provider's reviews of New Service Customer's initial drawings of the Direct Assignment Facilities and/or Customer-Funded Upgrades that the New Service Customer is building shall not be construed as confirming, endorsing or providing a warranty as to the fitness, safety, durability or reliability of such facilities or the design thereof. At its sole cost and expense, New Service Customer shall make such changes to the design of the pertinent Direct Assignment Facilities and/or Customer-Funded Upgrades as may reasonably be required by Transmission Provider, in consultation with the Transmission Owner, to ensure that the Direct Assignment Facilities or Customer-Funded Upgrades that New Service Customer is building meet Applicable Standards and conform with the Facilities Study.

6.3 Revisions to Schedule and Scope of Work.

The Schedule and Scope of Work shall be revised as required in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals, or otherwise by mutual agreement of the Transmission Provider and Transmission Owner, which agreement shall not be unreasonably withheld, conditioned or delayed.

6.4 Suspension.

The following provision applies to New Service Requests which have entered the New Services Queue prior to February 1, 2011:

New Service Customer shall have the right, upon written notice to Transmission Provider and Transmission Owner, to suspend at any time all work by the Transmission Owner associated with the construction and installation of the Direct Assignment Facilities and/or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, required under this Upgrade CSA, with the condition that, notwithstanding such suspension, the Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Provider's safety and reliability criteria. This suspension right permits the New Service Customer to request one or more suspensions of work for a cumulative period of up to three years. New Service Customer's notice of suspension shall include an estimated duration of the suspension and other information related to the suspension.

The following provision applies to New Service Requests which have entered the New Services Queue on or after February 1, 2011:

New Service Customer shall have the right, upon written notice to Transmission Provider and Transmission Owner, to suspend at any time all work by the Transmission Owner associated with the construction and installation of the Direct Assignment Facilities and/or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, required under this Upgrade CSA, with the condition that, notwithstanding such suspension, the Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Provider's safety and reliability criteria. This suspension right permits the New Service Customer to request one or more suspensions of work for a cumulative period of up to (i) three years if the Transmission Provider determines that such suspension would not be deemed a Material Modification, or (ii) one year if the Transmission Provider determines that such suspension would be deemed a Material Modification. New Service Customer's notice of suspension shall include an estimated duration of the suspension and other information related to the suspension.

6.4.1 Costs.

In the event of a suspension under this section, New Service Customer shall be responsible for all reasonable and necessary Cancellation Costs which the Transmission Owner or Transmission Provider: (i) has incurred pursuant to this Upgrade CSA prior to the suspension; and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and/or labor contracts which Transmission Owner or Transmission Provider cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, the Transmission Owner or Transmission Provider, as the case may be, shall obtain New Service Customer's authorization to do so. Upon the request of the New Service Customer, the Transmission Owner shall provide an estimate of the Cancellation Costs. Transmission Provider shall invoice New Service Customer for Cancellation Costs for which the customer is liable under this section. Transmission Owner and Transmission Provider shall use due diligence to minimize Cancellation Costs in the event of a suspension of work.

6.4.2 Duration of Suspension.

If the Transmission Owner suspends work on the Direct Assignment Facilities and/or Customer-Funded Upgrades required under this Upgrade CSA pursuant to this Section 6.4.2, and the New Service Customer has not requested Transmission Provider and the Transmission Owner to recommence the work required under the applicable agreement(s) on or before the expiration of the time period allowed under this Section 6.4 following commencement of such suspension, then this Upgrade CSA shall terminate. The suspension time period shall begin on the date of the New Service Customer's written notice of suspension to Transmission Provider and Transmission Owner.