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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. ER19-1958-000
Order Nos. 845 and 845-A Compliance Filing

Dear Secretary Bose:

I. INTRODUCTION

PJM Interconnection, L.L.C. ("PJM") respectfully submits this filing in compliance with Order No. 845 Reform of Generator Interconnection Procedures and Agreements issued by the Federal Energy Regulatory Commission ("Commission" or "FERC") on April 19, 2018, and Order No. 845-A issued by the Commission on February 21, 2019 (collectively referred to herein as the "Final Rule").[1]

PJM proposes to revise its Open Access Transmission Tariff ("Tariff") interconnection processes and *pro forma* service agreements to comply with the revisions required pursuant to Order No. 845 and Order No. 845-A. Specifically, PJM proposes Tariff revisions to incorporate the Commission's changes to *pro forma* large generator interconnection procedures ("LGIP") and large generator interconnection agreement ("LGIA") aimed at improving certainty for Interconnection Customers, promoting more informed interconnection decisions and enhancing the interconnection process.

[1] *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 163 FERC ¶ 61,043 (2018); Order No. 845-A, 166 FERC ¶ 61,137 (2019).

Pursuant to the compliance procedures in Order No. 845, PJM as a regional transmission organization ("RTO") is required to adopt and incorporate the Order No. 845 revisions to the *pro forma* LGIP and *pro forma* LGIA, as stated in Appendices B and C to Order No. 845 and Order No. 845-A. In developing the compliance revisions, PJM built upon its existing interconnection procedures and agreements, which already contain the framework for many of the Order No. 845 reforms. As a result, PJM is able to propose revisions that closely mirror the *pro forma* language in the Final Rule, with minor adjustments to reflect terminology or section numbering differences.

In this compliance filing, PJM incorporates the Order No. 845 revisions to the extent feasible. Such revisions are either expressly required under Order Nos. 845, necessary to implement or clarify the existing Tariff language to accommodate the Final Rule's directives. In addition, PJM includes non-substantive clarifying adjustments, or clean up revisions of the kind that the Commission has permitted previously in compliance filings.

While all of PJM's proposed revisions are in line with the intent of Order No. 845 reforms, many of the previously-accepted variations under Order No. 2003[2] and the proposed modifications to accommodate the Order No. 845 revisions require PJM to seek independent entity variations in two primary areas in order to comply with the Final Rule: (i) Utilization of Surplus Interconnection Service; and (ii) Interconnection Study Metrics Reporting. Specifically, PJM seeks the following variances to allow:

- PJM to process requests for Surplus Interconnection Service on an expedited basis using its existing single integrated interconnection queue process, rather than

[2] *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, 104 FERC ¶ 61,103 (2003), *order on reh'g*, Order No. 2003-A, 106 FERC ¶ 61,220, *order on reh'g*, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), *order on reh'g*, Order No. 2003-C, 111 FERC ¶ 61,401 (2005), *aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007).

developing a process outside of the interconnection queue as contemplated by the Final Rule;

- an Interconnection Customer to retain its queue position, if its Interconnection Request does not qualify for Surplus Interconnection Service, and proceed through the Interconnection Study Process as a zero MW generator;

- PJM to report its study performance metrics, including any required additional reports pursuant to proposed Tariff, section 41.6, on a six-month basis consistent with its existing six-month queue cycle, rather than on a quarterly basis as contemplated by Order No. 845; and

- PJM to post summary interconnection study metrics only on its website, without providing a link to OASIS, which is consistent with PJM's current posting procedures.

As explained below, PJM's requested variances result in Tariff revisions that are consistent with the intent of Order No. 845 but will allow for more effective compliance in light of PJM's previously-accepted variations, current Tariff and established practices. Because PJM's proposed Tariff revisions meet the directives of the Final Rule, PJM respectfully submits that the Commission grant PJM's requested independent entity variations and accept the proposed Tariff revisions submitted herein in their entirety without modification.

II. STAKEHOLDER PROCESS

PJM has worked with its stakeholders to address its efforts to comply with the Final Rule. PJM has presented to, and discussed with, stakeholders how it intended to comply with the directives of the Final Rule. At each meeting, PJM requested, received and considered comments from all interested parties. Also, PJM posted draft tariff revisions.

To ensure transparency and direct stakeholder involved in developing the Order No. 845 revisions, PJM convened four sessions of the Special Planning Committee to discuss the revisions needed to comply with the Final Rule, PJM's proposed revisions and to solicit feedback. Specifically, sessions of this committee were held on August 8, 2018, October 16, 2018, April 20,

2019 and May 2, 2019. PJM also provided updates on the status of the work regarding each of the ten interconnection reforms to the Planning Committee on September 13, 2018, October 11, 2018, November 8, 2018, February 7, 2019, March 7, 2019, April 11, 2019 and May 16, 2019.

Additionally, stakeholders were invited to contact PJM representatives directly to ask follow up questions and to provide additional comments on the proposal.

III. DESCRIPTION OF PJM's COMPLIANCE FILING

A. Revisions to the Interconnection Process to Improve Certainty for Interconnection Customer

The following two sections, Option to Build and Dispute Resolution, are revised to address the Commission's Order No. 845 reforms intended to improve certainty by providing Interconnection Customers more predictability in the interconnection process, as well the costs and timing of interconnecting to the transmission system.[3]

1. Option to Build

a. Existing Option to Build Provisions

Under the Commission's existing *pro forma* LGIA,[4] Option to Build is available to an Interconnection Customer only if the Interconnected Transmission Owner does not agree to the Interconnection Customer's construction timeline and only with respect to Transmission Owner

[3] Order No. 845 at P 45.

[4] LGIA, Article 5.1.3.

Interconnection Facilities[5] and Stand Alone Network Upgrades.[6] PJM's Option to Build provisions included in Tariff, Attachment P—the *pro forma* Interconnection Construction Service Agreement ("ICSA")[7]—vary from the Commission's current *pro forma* process; and, in fact, are broader than the parallel provisions in the Commission's *pro forma* LGIA.[8] Specifically, under PJM's existing Tariff an Interconnection Customer may exercise the Option to Build if: (i) the Interconnected Transmission Owner and Interconnection Customer are unable to agree on the terms of the ICSA; or (ii) the Interconnection Customer and the Interconnected Transmission Owner mutually agree that the Interconnection Customer may exercise the Option to Build.[9] In addition under PJM's current ICSA,[10] the Interconnection Customer may utilize the Option to Build under the conditions enumerated above for any transmission owner facilities that are Local

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[5] Transmission Provider's Interconnection Facilities are defined to mean

> [A]ll facilities and equipment owned, controlled or operated by the Transmission Provider from the Point of Change of Ownership to the Point of Interconnection identified in Appendix A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Transmission Provider's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

See LGIA, Article 1 (Definitions).

[6] Stand Alone Network Upgrades are defined to mean

> Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction.

See LGIA, Article 1 (Definitions).

[7] ICSA, Appendix 2, section 3.2.

[8] LGIA, Article 5.

[9] ICSA, Appendix 2, section 3.2.3.1.

[10] Option to Build is available to Interconnection Customers under the ICSA at Attachment P, Appendix 2, section 3.2.3 and New Service Customers under the Upgrade Construction Service Agreement ("Upgrade CSA") at Attachment GG, Appendix III, section 6.2. Both sections are proposed to be modified in this filing to comply with the Final Rule.

Upgrades[11] or Network Upgrades[12] to transmission system facilities.[13] Additionally, different from the *pro forma* LGIA, PJM uses the terms: (i) "Direct Connection Network Upgrades" in lieu of "Stand Alone Network Upgrades" to describe those transmission facilities that can be constructed without affecting day-to-day operations of the transmission system during their construction; and (ii) "Local Upgrades" in lieu of "Distribution Upgrades."

b. Order No. 845 Option to Build Reforms

Order No. 845 modifies the *pro forma* LGIA articles 5.1 (Options), 5.1.3 (Option to Build) and 5.1.4 (Negotiated Option) to allow Interconnection Customers to unilaterally select the Option to Build for Transmission Owner Interconnection Facilities[14] and Stand Alone Network Upgrades

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[11] Local Upgrades are defined to mean:

> [M]odifications 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.

See Tariff, OATT Definitions L-M-N.

[12] Network Upgrades are defined to mean:

> [M]odifications 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.

See Tariff, OATT Definitions L-M-N.

[13] ICSA, Appendix 2, section 3.2.3.1.

[14] Under Order No. 2003, in response to American Transmission's proposal to allow the Transmission Provider to step in and assume construction responsibilities in case of lapses resulting from Interconnection Customer exercising Option to Build, the Commission found that because Option to Build was limited to the construction of only

regardless of whether the Transmission Owner can complete construction of such facilities by the Interconnection Customer's proposed dates.[15] In response to concerns raised under the notice of proposed rulemaking ("NOPR")[16] and Requests for Clarification and/or Rehearing that the Commission's expanded right of the Interconnection Customer to unilaterally select the Option to Build for Transmission Owner Interconnection Facilities and Stand Alone Network Upgrades will compromise system reliability, the Commission found the safeguards embodied in the *pro forma* LGIA article 5.2 were sufficient and no further changes were necessary to guarantee the reliability of the facilities in question.[17]

The Commission in Order No. 845-A further clarified certain aspects related to Option to Build. Specifically it clarified (i) that the Option to Build does not apply to Stand Alone Network Upgrades on affected systems;[18] (ii) in the event that the Interconnection Customer and Transmission Provider disagree that an upgrade is a Stand Alone Network Upgrade, the Transmission Provider is required to provide a written explanation as to why the upgrade in question is not a Stand Alone Network Upgrade;[19] and (iii) that Interconnected Transmission Owner can recover oversight costs associated with the Option to Build.[20]

Transmission Provider Interconnection Facilities and Stand Alone Network Upgrades any such lapses would affect only the Interconnection Customer and, if it has the potential to affect anyone other than the Interconnection Customer, the Commission noted that it will address such concerns when brought to its attention. *See* Order No. 2003 at P 361.

[15] Order No. 845 at P 85.

[16] *Reform of Generator Interconnection Procedures and Agreements*, Notice of Proposed Rulemaking, 157 FERC ¶ 61,212 (2016) ("NOPR"). The NOPR was published in the Federal Register on January 13, 2019.

[17] Order No. 845 at P 91.

[18] Order No. 845-A at P 61.

[19] Order No. 845-A at P 68.

[20] Order No. 845-A at P 74.

c. PJM's Proposed Revisions to the *Pro Forma* ICSA

i. Use of the Term Direct Connection Network Upgrades

To comply with Order No. 845, PJM proposes to modify the use of the term Direct Connection Network Upgrades to: (i) clarify that Option to Build does not apply to Direct Connection Network Upgrades on an Affected System;[21] (ii) clarify that the Transmission Provider and Interconnection Customer must agree on what constitutes a Direct Connection Network Upgrade; (iii) require that Direct Connection Network Upgrade will be identified in the ICSA, Schedule D; and (iv) provide that when there is a disagreement as to whether a particular Network Upgrade is a Direct Connection Network Upgrade, the Interconnected Transmission Provider must provide the Interconnection Customer with a written explanation of its determination that details the technical reasons why a network upgrade is not a Direct Connection Network Upgrade.

> Direct Connection Network Upgrades which are Network Upgrades <u>that are not part of an Affected System</u> 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.

This revision to the definition of "Direct Connection Network Upgrade" complies with Order No. 845 as it now includes the Order No. 845 limitation that such upgrades "are not a part of an Affected System."[22] PJM's proposed revision to the definition of "Direct Connection Network Upgrade" varies from the *pro forma* definition of Stand Alone Upgrade in that it does not include the last sentence prescribed by Order No. 845 that provides if the Transmission

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[21] Order No. 845-A at P 61. Under the Tariff, Affected System shall mean an electric system other than the Transmission Provider's Transmission System that may be affected by a proposed Interconnection or on which a proposed interconnection or addition of facilities or upgrades may require modifications or upgrades to the Transmission System. *See* Tariff, OATT Definitions A-B.

[22] *See* Order No. 845-A at P 68.

Provider and Interconnection Customer disagree as to what constitutes a Stand Alone Network Upgrade (in PJM a Direct Connection Network Upgrade), Transmission Provider must provide the Interconnection Customer a written technical explanation outlining why it does not consider the upgrade to be a Direct Connection Network Upgrade. Rather, PJM proposes to include this requirement in the *pro forma* ICSA (Tariff, Attachment P), Appendix 2, section 3.2.2.1, and *pro forma* Upgrade CSA (Tariff, Attachment GG), Appendix III, section 6.2.1 where it will be more visible to customers seeking to utilize Option to Build. Therefore, taken together these revisions to the definition of Direct Connection Network Upgrade and to the *pro forma* ICSA and Upgrade CSA comply with Order No. 845.

ii. Option to Build

To further comply with the Final Rule, PJM proposes revisions to ICSA, Appendix 2, section 3.2.3.1 (Option to Build) to allow the Interconnection Customer to elect the Option to Build regardless of whether the Interconnected Transmission Owner can meet the Interconnection Customer's proposed construction dates.[23] In adopting Order No. 845's expanded Option to Build, PJM proposes revisions that conform to the *pro forma* by clarifying that Option to Build applies

[23] Order No. 845 at PP 78, 85.

to "Transmission Owner Interconnection Facilities"[24] that are "Transmission Owner Attachment Facilities" and "Direct Connection Network Upgrades." This change is consistent with both Order No. 2003 and the Final Rule. Both of those orders limit the Option to Build to "Stand Alone Network Upgrades," which are the equivalent of "Transmission Owner Attachment Facilities" and "Direct Connection Network Upgrades under the Tariff.

As the Commission noted, prior to Order No. 845, the Interconnected Transmission Owner could avoid the Interconnection Customer's exercise of Option to Build by meeting the Interconnection's Customers construction timeline.[25] In other words, the Option to Build was viewed as a "last resort."[26] With Order No. 845's more expansive application of the Option to Build, it is no longer a last resort and likely will occur more often and have more impact on PJM Transmission Owners and PJM. Therefore, PJM proposes to revise its ICSA, Appendix 2, section 3.2.3.1 to conform to the *pro forma* LGIA to permit an Interconnection Customer to "assume responsibility for the design, procurement and construction of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct

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[24] Transmission Owner Interconnection Facilities are defined to mean:

> [A]ll Interconnection Facilities that are not Customer Interconnection Facilities and that, after the transfer under Tariff, Attachment P, Appendix 2, section 5.5 to the Interconnected Transmission Owner of title to any Transmission Owner Interconnection Facilities that the Interconnection Customer constructed, are owned, controlled, operated and maintained by the Interconnected Transmission Owner on the Interconnected Transmission Owner's side of the Point of Interconnection identified in appendices to the Interconnection Service Agreement and to the Interconnection Construction Service Agreement, including any modifications, additions or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Customer Facility with the Transmission System or interconnected distribution facilities.

Tariff, OATT Definitions T-U-V.

[25] Order No. 845 at P 75.

[26] *See* Order No. 2003-A PP 218-19.

Connection Network Upgrades" consistent with the Interconnection Customer's construction timeline specified in Schedule J of the ICSA.[27]

PJM also proposes to incorporate *pro forma* LGIA, article 5.2, *in toto* to its Option to Build provisions as a new subsection 3.2.3.2(a) in Appendix 2 to the ICSA.[28] Under PJM's existing Option to Build provisions, PJM does not include the *pro forma* LGIA, article 5.2. Instead, PJM included other provisions in section 3.2.3.2 specific to the construction of the Option to Build facilities, such as obtaining all necessary permits and land rights, as well as defining the Interconnected Transmission Owner's right to perform line attachments and inspect, test and energize the facilities built by the Interconnection Customer.[29] However, in light of the Commission's emphasis on the safeguards embodied in *pro forma* LGIA, article 5.2,[30] PJM determined to include with its proposed revisions the safeguards in the *pro forma* LGIA, article 5.2 to ensure a just and reasonable process.[31]

To that end, PJM proposes to add a new section 3.2.3.2(a) to include all of article 5.2 of the *pro forma* LGIA (sections 5.2(1) through (11)), edited to comport with PJM's Tariff

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[27] *See also* Upgrade CSA, Appendix III, section 6.2.1 *proposed*.

[28] *See also* Upgrade CSA, Appendix III, section 6.2.2(a) *proposed*.

[29] ICSA, Appendix 2, section 3.2.3.2(a) through (d); *see also* Upgrade CSA, Appendix III, section 6.2.2(a) through (d).

[30] Order No. 845 at P 91 (stating that the safeguards embodied in article 5.2 of the *pro forma* LGIA were "sufficient to guarantee the reliability of the facilities in question.").

[31] In responding to concerns raised in both comments to the NOPR and requests for rehearing that Order No. 845's expanded Option to Build (i) will compromise system reliability, (ii) require that Transmission Owners and Transmission Providers are indemnified from claims arising from Interconnection Customers' construction of Transmission Owners' facilities, and (iii) increase Transmission Owners' risk regarding security compliance and project management, the Commission relied upon the provisions in Article 5.2 of the *pro forma* LGIA to find no additional revisions were necessary to ensure the safety and reliability of the system. *See* Order No. 845 at PP 88, 89, 93, 96; *see also* Order No. 845-A at PP 41, 42, 43, 45.

terminology.[32] PJM further proposes to move existing sections 3.2.3.2(a) through (d) to section 3.2.3.2(b). Finally, consistent with paragraph 75 of Order No. 845-A, PJM proposes to add a new section 3.2.3.2(a)(12) to allow Interconnected Transmission Owners to collect oversight costs related to the Option to Build by including a placeholder for Interconnected Transmission Owners and Interconnection Customers to negotiate such costs and to require that the amount for such costs is clearly stated in the ICSA.[33]

PJM notes one further revision. On May 21, 2019, PJM submitted a compliance filing[34] to comply with the recent Commission order in Docket No. EL19-18-000.[35] In the May 10 Order, the Commission granted in part and denied in part a complaint by American Electric Power Service Corporation concerning aspects of PJM's Option to Build process.[36] In granting the complaint in part, the Commission directed PJM to make two revisions to the ICSA. First, the Commission directed PJM "to file revised tariff records that include an indemnity provision in the *pro forma* ICSA that complies with Order No. 2003" (*i.e.*, conforms with the *pro forma* LGIA, article 5.2(7)).[37] Second, the Commission directed PJM "to modify its ICSA, consistent with *pro forma*

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[32] *See* Upgrade CSA, Appendix III, section 6.2.2(a) *proposed*.

[33] ICSA, Appendix 2, section 3.2.3.2(a)(12) *proposed*; *see also* Upgrade CSA, Appendix III, section 6.2.2(a)(12) *proposed*. PJM also proposes to revise the sections relative to invoicing of Transmission Owner Costs related to Option to Build. Rather than invoicing on a monthly basis as indicated by Order No. 845, PJM proposes to bill such charges on a quarterly basis, which is consistent with its current invoicing provisions and practices for Transmission Owner Costs under Interconnection Service Agreement (Tariff, Attachment O), ICSA and Upgrade CSA. *See* Interconnection Service Agreement, Appendix 2, section 11.2.2; ICSA, Appendix 2, section 9.2; Upgrade CSA, Appendix III, section 9.3.

[34] *PJM Interconnection, L.L.C.*, Compliance Filing Concerning Option to Build Provisions, Docket No. ER19-1922-000 (May 21, 2019) ("EL19-18-000 Compliance Filing").

[35] *PJM Interconnection, L.L.C.*, 167 FERC ¶ 61,121 (2019) ("May 10 Order").

[36] *Am. Elec. Power Serv. Corp. v. PJM Interconnection, L.L.C.*, Complaint of American Electric Power Service Corporation, Docket No. EL19-18-000 (Nov. 19, 2018).

[37] May 10 Order at P 52.

LGIA article 5.2(3) . . . to specifically require a transmission owner to review and approve the engineering design of facilities constructed under the Option to Build."[38] In the EL19-18-000 Compliance Filing,[39] PJM added a new subsection 3.2.3.2(e) to Appendix 2 of the *pro forma* ICSA to incorporate the following language:

> (e) Interconnection shall indemnify Interconnected Transmission Owner and Transmission Provider for claims arising from Interconnection Customer's construction of Transmission Owner Interconnection Facilities under the terms and procedures applicable to Sections 12.1, 12.3, 12.3, and 12.4 of this Appendix 2.[40]

Because PJM is incorporating the *pro forma* LGIA, article 5.2 wholly into ICSA, Appendix 2 section 3.2.3.2(a) (with modifications only for Tariff defined terms and section references), PJM is moving subsection 3.2.3.2(e) in its entirety to 3.2.3.2(a)(7) to mirror the organization of the *pro forma* LGIA, article 5.2. No substantive changes to the subsection are being made.

Finally, PJM proposes additional revisions to Tariff, section 212[41] and ICSA, Appendix 2, section 3.2.3.1 that vary from the *pro forma* LGIA. Specifically, PJM proposes to require Interconnection Customer to request to exercise Option to Build within 30 days from the date when the Interconnection Customer receives the results of the Facilities Study (or, if no Facilities Study is required, at the completion of the System Impact Study). This varies from the *pro forma* LGIA, article 5.1 that requires the Interconnection Customer to elect Option to Build at the same time the Interconnection Customer selects the in-service date and commercial operation date.[42] Today,

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[38] May 10 Order at P 61.

[39] Compliance Filing of PJM Interconnection, L.L.C., Docket No. ER19-1922-000 (May 21, 2019).

[40] *See* EL19-18-000 Compliance Filing at 2-3.

[41] *See also* Tariff, section 213 (Upgrade CSA) *proposed*.

[42] LGIA, Article 5.1. PJM's equivalent section simply provides that the sequence of Interconnection Customer's dates of Initial Operation will determine the sequence of construction of Network Upgrades. ICSA, section 3.2.1.1.

under PJM's Tariff, the Interconnection Customer does not have to exercise Option to Build until "no later than seven days after the date that is 30 days after execution of the Interconnection Service Agreement."[43] This "after the fact" deadline is wholly inefficient. For example, if the Interconnection Customer chooses to wait until after receiving the Interconnection Service Agreement to exercise Option to Build, PJM must revise the Interconnection Service Agreement to reflect that option selection. In particular, the security required pursuant to Tariff, section 212.4 would have to be revised to account for those facilities that will be constructed by the Interconnection Customer.[44] By moving the selection date to no later than 30 days after the Interconnection Customer receives its Facility Study, but 30 days prior to executing the Interconnection Service Agreement, PJM, Interconnected Transmission Owner and Interconnection Customer will have time to review and consider any changes to the Interconnection Service Agreement before the Interconnection Service Agreement must be fully executed by all parties. It also provides the Interconnection Customer the ability to decide whether it wishes to use the dispute resolution process or request the Interconnection Service Agreement be filed unexecuted. In addition, such change is more in keeping with Order No. 845, which contemplates that the Interconnection Customer will request Option to Build before executing the Interconnection Service Agreement. Therefore, permitting such variance will ensure a more efficient and transparent result and more closely align with the Commission's *pro forma* process.

[43] ICSA, Appendix 2, section 3.2.3.1.

[44] *See also* Tariff, section 213.4 (Retaining Priority and Security) *proposed*.

iii. Negotiated Contract Option

PJM is not proposing any changes to its "Negotiated Contract Option" provisions.[45] In Order No. 845, the Commission indicated that it was amending the "Negotiated Option" provision, but "the negotiated option references the current limitation on the option to build."[46] This is not case with regard to the "Negotiated Contract Option" in PJM's ICSA and Upgrade CSA.[47] Rather, PJM's "Negotiated Contract Option" is an alternative to the Standard Option and is not tied to the Option to Build. Under PJM's construct, the parties mutually may agree on terms different from those included in the Standard Option without any consideration of invoking the Option to Build. The terms that the parties may negotiate 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 Cost.[48] Therefore, because PJM's "Negotiated Contract Option" is unrelated to the Option to Build, PJM is making no changes to this provision.

2. Dispute Resolution

The Commission noted in the Final Rule that the current arbitration process embodied in the *pro forma* LGIP, section 13.5 (PJM equivalent Tariff, section 12.2) is effectively unavailable to an Interconnection Customer if a Transmission Provider or Transmission Owner opposes the

[45] ICSA, Appendix 2, section 3.2.2.

[46] Order No. 845 at P 80.

[47] Upgrade CSA, Appendix III, section 6.1.1.

[48] ICSA, Appendix 2, section 3.2.2; *see also* Upgrade CSA, Appendix III, section 6.1.1.

arbitration process, and, therefore, "existing dispute resolution procedures" discriminatorily "may effectively prevent the other disputing party from pursuing dispute resolution."[49]

Under Order No. 845, the Commission adopted a non-binding dispute resolution process to serve as an alternative to, and not a replacement of, the existing arbitration process described in *pro forma* LGIP, section 13.5, which is a binding process.[50] PJM's current arbitration process contained in Tariff, section 12.1 generally mirrors section 13.5 of the *pro forma* LGIP[51] with one exception. Section 12.1 does not explicitly include disputes associated with Interconnection Customers. Rather, it pertains to "any disputes between a Transmission Customer and affected Transmission Owner or the Transmission Provider involving transmission service under the Tariff . . . ."[52] Nonetheless, PJM would apply such procedures to interconnection disputes. To clarify the application of Tariff, section 12.1 and to comply with Order No. 845, PJM proposes to revise Tariff, section 12.1 to add the term "New Service Customers" to that section. The term "New Services Customer" includes Interconnection Customers and thus this section now explicitly specifies that it will apply to interconnection disputes (as well as any other disputes involving a New Service Customer).[53] This revision is appropriate to satisfy the Commission's expectation

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[49] Order No. 845 at P 132 (citing NOPR at P 84).

[50] Order No. 845 at PP 132, 133.

[51] Both provisions permit a party with a dispute arising out of the interconnection processes to provide notice to the other party of the dispute or claim, which is then referred to a designated senior representative of each party. Should the parties fail to reach resolution on an informal basis, the parties must mutually agree to submit to arbitration. *See pro forma* LGIP, section 13.5; *see also* Tariff, section 2.1.

[52] Tariff, section 12.1. Transmission Customer shall mean any Eligible Customer (or its Designated Agent) that (i) executes a Service Agreement, or (ii) requests in writing that the Transmission Provider file with the Commission a proposed unexecuted Service Agreement to receive transmission service under Tariff, Part II. This term is used in Tariff, Part I and Part VI to include customers receiving transmission service under Tariff, Part II and Part III.

[53] New Service Customer is defined to mean "all customers that submit an Interconnection Request, a Completed Application, or an Upgrade Request that is pending in the New Services Queue." *See* Tariff, Definitions L-M-N.

that Transmission Providers have both an arbitration process (*pro forma* LGIP, section 13.5)[54] and a non-binding dispute resolution process (*pro forma* LGIP, section 13.5.5)[55] for interconnection disputes.

To further comply with Order No. 845 PJM also proposes to add a new Tariff, Part IV, Subpart A, section 40 (Non-binding Dispute Resolution Procedures) consistent with new section 13.5.5 of the *pro forma* LGIP. The language in section 40 mirrors the language in new section 13.5.5, and establishes interconnection dispute resolution procedures that allow a disputing party to unilaterally seek dispute resolution.[56] In Order No. 845 the Commission made clear that this new *pro forma* LGIP provision "will be an alternative to, but not a replacement of, the existing arbitration process described in section 13.5 of the *pro forma* LGIP, which is a binding process."[57] Thus, with these proposed revisions to Tariff, sections 12.1 and 40, PJM satisfies all requirements of Order No. 845 relative to Dispute Resolution.

B. Revisions to the Interconnection Process to Promote More Informed Interconnection

Order No. 845 requires reforms designed to improve interconnection process transparency and improved information to benefit all participants in the interconnection process. This section includes the following three reforms: (i) identification and definition of Contingent Facilities;

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[54] Tariff, section 12.1 *proposed*.

[55] Tariff, sections 12.2, 12.3 *proposed*.

[56] Order No. 845 at PP 123, 125.

[57] Order No. 845 at P 154.

(ii) transparency regarding study models and assumptions; (iii) revision to definition of Generating Facility; and (iv) Interconnection Study deadlines.[58]

1. Identification and Definition of Contingent Facilities

Order No. 845 requires Transmission Providers to revise their interconnection process to add a new section 3.8 to the *pro forma* LGIP that requires Transmission Provider to publish a method to be used to identify Contingent Facilities.[59] The method must be transparent and sufficiently detailed to allow the Interconnection Customer to determine why a specific contingent facility is identified and how that facility impacts the Interconnection Request.[60] Order No. 845 further requires that the Transmission Provider must provide a list of potential Contingent Facilities to the Interconnection Customer at the conclusion of the System Impact Study.[61] Additionally, if requested, the Transmission Provider must provide the estimated network upgrade costs and estimated in-service completion time associated with each identified Contingent Facility if the Transmission Provider determines that the information is readily available and not commercially sensitive.[62] The Commission proposes that these requirements should be included in a new section 3.8 of the *pro forma* LGIP.

To comply with Order No. 845, PJM first proposes to add the *pro forma* definition of Contingent Facilities to its Tariff:

> Contingent Facilities shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request's costs, timing and

[58] Order No. 845 at P 191.

[59] Order No. 845 at P 192; *see also* Order No. 845-A at P 76.

[60] Order No. 845 at P 192.

[61] Order No. 845 at P 192; *see also* Order No. 845-A at P 76.

[62] Order No. 845 at P 192; *see also* Order No. 845-A at P 76.

> study findings are dependent, and if delayed or not built, could cause a need for interconnection restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

Second, to comply with the Order No. 845 directive to add a new section 3.8 to the *pro forma* LGIP, PJM proposes to add the following new Tariff, section 205.2.1 that explains the methodology PJM uses for identifying Contingent Facilities that are provided to the Interconnection Customer at the conclusion of the System Impact Study. This new section also states that PJM will provide, upon request of the Interconnection Customer, the estimated costs and in-service dates of each Contingent Facility, "when [such] information is *readily available and* not commercially sensitive."[63]

> Transmission Provider shall identify the Contingent Facilities to be provided to Interconnection Customer in the System Impact Study by reviewing unbuilt Interconnection Facilities and/or Network Upgrades (including those still subject to cost allocation in accordance with the PJM Manuals) associated with an Interconnection Customer with a higher queue priority upon which the Interconnection Customer's cost, timing and study findings are dependent; and, if delayed or not built, could cause a need for interconnection restudies of the Interconnection Request or reassessment of the unbuilt Interconnection Facilities and/or Network Upgrades. Transmission Provider shall include the list of Contingent Facilities in the System Impact Study, Facilities Study, if applicable, and Interconnection Service Agreement, including why a specific Contingent Facility was identified and how it relates to the Interconnection Request. Transmission Provider shall also provide to the Interconnection Customer, upon request, the estimated Interconnection Facility and/or Network Upgrade estimated costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and not commercially sensitive.

PJM also proposes to modify Tariff, section 205.2 to add Contingent Facilities to the list of facilities identified in the System Impact Study as needed to accommodate the New Service

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[63] Order No. 845 at PP 192, 199; *see* Order No. 845 at P 212 n.367 ("In Order No. 792, the Commission defined 'readily available' information as 'information that the [t]ransmission [p]rovider currently has on hand' . . . ." (quoting *Small Generator Interconnection Agreements and Procedures*, Order No. 792, 145 FERC ¶ 61,159, at PP 63-64 (2013), *order on clarification*, Order No. 792-A, 146 FERC ¶ 61,214 (2014)).

Requests, including generator interconnection projects and add to the Specifications section of the Interconnection Service Agreement a placeholder for additional Contingent Facilities that must be completed prior to Commercial Operation of the Generating Facility.[64]

2. Transparency Regarding Study Models and Assumptions

To increase transparency and ensure consistency in the analysis of Interconnection Requests, Order No. 845 requires Transmission Providers to detail in their interconnection procedures and post on their respective websites all the network models and underlying assumptions used for Interconnection Studies.[65] To implement this requirement, the Final Rule revises section 2.3 of the *pro forma* LGIP, to require Transmission Providers to maintain network models and underlying assumptions on its OASIS site or on a password protected website.[66] The Commission expects that these revisions will allow Interconnection Customers to make more informed decisions while holding Transmission Providers accountable as to which network models and assumptions they use to assess Interconnection Requests.[67]

PJM currently posts a list of all its network models, Base Cases and underlying assumptions used for Interconnection Studies, including shift factors, dispatch assumptions, load power factors and power flows on a password-protected website,[68] subject to all appropriate confidentiality and critical energy infrastructure information ("CEII") requirements.

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[64] Interconnection Service Agreement, Specifications section 3.0.d *proposed*.

[65] Order No. 845 at PP 221, 236.

[66] Order No. 845 at P 236.

[67] Order No. 845 at P 227.

[68] *See Modeling Data*, PJM Interconnection, L.L.C., https://www.pjm.com/planning/rtep-development/powerflow-cases.aspx (last visited May 21, 2019).

PJM does not utilize an OASIS site for planning and, therefore, is not able to comply with the requirement that PJM provide a link to the location of the information on the OASIS site.[69] Unlike other RTOs, PJM's website, not OASIS is the central location for all the information needed to request Interconnection Service. Therefore, PJM proposes to modify section 2.3 of the *pro forma* LGIP to remove the requirement.

Accordingly, PJM proposes to revise Tariff, section 36.1.7 (which is the comparable provision as section 2.3 of the *pro forma* LGIP) as follows:

> Transmission Provider shall ~~provide~~ maintain ~~Interconnection Customer with~~ base case power flow, short circuit and stability data bases, including all underlying assumptions, and contingency list ~~upon request~~ on a password-protected website, ~~and~~ subject to the confidentiality provisions of ~~Section 223 of the~~ Tariff, Part VI, section 223. In addition, Transmission Provider shall maintain base case power flows and underlying assumptions on a password-protected website. Such base case power flows and underlying assumptions should reasonably represent those used during the most recent interconnection study. Transmission Provider may require Interconnection Customers and password-protected website users to sign any required confidentiality agreements before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects, that are included in the then-current, approved Regional Transmission Expansion Plan.

3. Definition of Generating Facility

Order No. 845 adopted the NOPR proposal to modify the definition of "Generating Facility" in the *pro forma* LGIP and LGIA to include "and/or storage for later injection."[70] The Commission determined this modification is necessary to reduce a potential barrier to large electric

[69] Order No. 845 at P 238.

[70] Order No. 845 at P 273 (citation omitted).

storage resources with a Generating Facility capacity above 20 MW that wish to interconnect pursuant to the terms of the *pro forma* LGIP and LGIA.[71]

PJM's Tariff currently does not include the *pro forma* definition of "Generating Facility." In place of the *pro forma* definition, PJM uses the terms "Capacity Resource," "Customer Facility," and "Energy Resource" as previously accepted by the Commission. PJM proposes to continue to use those defined terms but also to modify the Tariff to add the *pro forma* definition of "Generating Facility" to the Tariff definitions, including the Order No. 845 additional language "and/or storage for later injection":

> Generating Facility shall mean Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the interconnection customer's Interconnection Facilities.

PJM also proposes to make ministerial clean up changes to Tariff, Parts IV and VI to capitalize "Generating Facility," as appropriate, in recognition of this new definition.

4. Interconnection Study Deadline Reporting

Order No. 845 modified the *pro forma* LGIP to institute quarterly reporting requirements for Transmission Providers to post Interconnection Study performance metrics detailing completion of Interconnection Studies within established timeframes.[72] Such information must be posted on the Transmission Provider's OASIS site or a public website.[73] If the Transmission Provider exceeds its Interconnection Study deadlines by more than 25 percent of any study type for two consecutive calendar quarters, the Transmission Provider must file information reports

[71] Order No. 845 at P 275.

[72] Order No. 845 at P 305.

[73] Order No. 845 at P 313.

with the Commission for four consecutive quarters. The intention of this new reporting requirement is to post "relevant metrics regarding study completion in prescribed timeframes,"[74] to provide increased transparency and information to Interconnection Customers without unduly burdening Transmission Providers.[75] Order No. 845-A further provided that the reporting requirement shall commence in the first calendar quarter of 2020.[76]

On this issue PJM seeks an "independent entity variation" and proposes an alternative that accomplishes the intent of the Commission's Order, while fitting into PJM's current construct. The Commission has allowed RTOs to have greater flexibility to customize their interconnection procedures and agreements based on regional needs.[77] PJM seeks such a variation to permit it to report performance metrics using PJM's six-month queue process rather than the quarterly reporting as laid out in Order No. 845. As explained more fully below, the variation is appropriate for PJM because:

- It would provide a reporting program that is in line with PJM's queue cycle deadlines, which would allow for a more complete picture of the status of PJM's Interconnection Study processing and provide more comparable reporting information from period to period;
- Reporting quarterly would not accurately reflect the information the metrics are intended to produce. For example, in the first and third quarters when the study reports

[74] Order No. 845 at P 326.

[75] Order No. 845-A at P 97.

[76] Order No. 845-A at P 107.

[77] Order No. 845 at P 43.

are due, the metrics would demonstrate PJM's performance. However, for quarters two and four the metrics would not yield an accurate picture of PJM's performance because studies are not due in those quarters under PJM's six-month study process. Thus, quarterly reporting likely would cause customer confusion rather than increased clarity to the marketplace would result due to the difficulties in comparing reports from quarter to quarter. As such the Commission's goal of increased transparency and information to the marketplace would be frustrated; and

- PJM presented this proposal to stakeholders and received no objections. Instead stakeholders voiced support for this proposal as providing additional understandable transparency by aligning the reporting with the present PJM queue study processes and deadlines.

For these reasons, PJM proposes a six-month reporting requirement under the independent entity exemption to better align the report with its own study deadlines.

PJM's currently conducts its queues on a six-month basis.[78] PJM's six-month queue cycle was accepted by the Commission in its April 30, 2012 Order issued in Docket No. ER12-1177-000.[79] PJM's six-month queue cycles run from April 1 through September 30 and October 1 through March 31 each year. PJM takes one month after the closing the queue to complete scoping meetings and its baseline model build and then another 90 days to complete the Feasibility Study.[80]

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[78] *PJM Interconnection, L.L.C.*, 139 FERC ¶ 61,079, at P 19 (2012) ("April 30 Order") (accepting PJM's six-month queue cycle and the need for a 30-day baseline development period).

[79] *Id.*

[80] Generally, Feasibility Studies issued on time will have a System Impact Study report due 180 days later, *i.e.*, 30 days to returnthe executed System Impact Study Agreement, 60 days to build the model and 120 days to perform the study. Projects whose Feasibility Studies are delayed will have a System Impact Study due 150 days later, *i.e.*, 30 days to

Thus, as approved, PJM concludes Feasibility Studies within approximately 120 days following the close of the queue.[81]

Based on the six-month queue cycle, studies are completed in the first and third quarters of the year. Thus, if PJM were to report on a quarterly basis, the study results for the second and fourth quarters would most likely reflect studies delayed from the first and third quarters. Consequently, the second and fourth quarters' numbers would not present a meaningful picture relative to timely completion of studies. Those numbers only would be reflected in the first and third quarters.

By way of example, the following table shows Feasibility Study performance metrics for 2018. The study deadlines are always January 31 and July 31. The blue shaded columns represent quarterly reporting results and the red columns represent six-month reporting results.

return the executed System Impact Study Agreement and 120 days to perform the System Impact Study. For late Studies, PJM foregoes the dedicated two-month model build. The Facilities Study Agreement is the only study cycle with a deadline tied directly to execution of the Facilities Study Agreement.

[81] *PJM Interconnection, L.L.C.*, Filing Letter, Docket No. ER12-1177-000, at 7 (Feb. 29, 2012). In the April 30 Order, the Commission found that with the development period, as well as the synergy among the six-month queue, the sliding queue and the alternate queue, such changes will improve the overall quality and timeliness of the study process. *See* April 30 Order at P 19.

	2018				2018	
	Jan-Mar	**Apr-Jun**	**Jul-Sep**	**Oct-Dec**	**Jan-Jun**	**Jul-Dec**
Studies Completed (A)	88	50	101	27	138	128
Studies Completed Late (B)	53	49	52	27	102	70
Studies in Progress beyond Deadline (C)	54	1	50	26	1	26
Average Completion Time (days)	282	283	101	222	282	126
Late Rate [(B+C)/(A+C)]	**75%**	**98%**	**68%**	**100%**	**74%**	**68%**

As you can see, quarterly reporting yields "zig-zag" results and improvement is masked by the "off months." It is not until you look at the numbers reported on a six-month basis that you can see improvement in study completion time.

In addition, allowing PJM to report its metrics on a six-month basis will not permit PJM to mask its performance results, i.e., if PJM misses the January 31 project completion deadline for a project, PJM does not have five more months to issue the report without impacting the late rate. As designed, the late rate calculation is tied to the actual number of days a study issues late. Therefore, even though the late rate is not reported until June 30, the actual number of days each study issued late is already factored into the calculation. The following table illustrates what the metrics would look like if PJM reported all delayed studies is issued on June 30, as opposed to the actual time it took to complete the report.

	2018		2018	
	Jan-Jun	**Jul-Dec**	**Jan-Jun**	**Jul-Dec**
Studies Completed (A)	138	128	138	128
Studies Completed Late (B)	102	70	102	70
Studies in Progress beyond Deadline (C)	1	26	1	26
Average Completion Time (days)	282	126	425	244
Late Rate [(B+C)/(A+C)]	74%	68%	74%	68%

As you can see, by reporting all delayed studies on June 30, the average completion time in days increased from 282 (January – June) to 425 (January – June). While PJM's performance results are still shown as delayed, the manipulated values are significantly longer than the 90-day study period. Consequently, permitting PJM to report its performance every six months, instead of quarterly, would not create any unfair advantage or permit PJM to mask its actual performance results.

PJM also requests a variance from the Commission requirement to include a link to its OASIS in addition to posting on the PJM website.[82] PJM has filed for and received independent entity variation from such requirement and requests that the Commission accept this compliance filing without such requirement. Additionally, PJM maintains on its website a webpage for all active generator Interconnection Requests which includes, among other things, the dates the

[82] *See supra* Section III.B.2.

projects entered the queue and links to each of the Feasibility Studies, System Impact Studies, and Facilities Studies. PJM also presents to stakeholders at the Planning Committee on a semi-annual basis a complete update on the status of all queue activity with updated statistics per queue.[83]

In compliance with the Final Rule PJM proposes revise its Tariff to adopt the Order No. 845 reporting requirements as detailed in the new section 3.5 of the *pro forma* LGIP on a six-month basis. The reporting requirements are set forth in a new Tariff, section 41.[84] While PJM is requesting an independent entity variation to report its performance metrics on a six-month basis, rather than quarterly, this variance will promote the Commission's desire for "improve[d] interconnection process transparency and provide improved information to benefit all participants in the interconnection process"[85] by allowing PJM to report performance metrics consistent with its Commission-approved six-month cycle. Additionally, reporting on a six-month, rather than quarterly, basis will more accurately represent PJM's reporting results, thereby resulting in improved interconnection process transparency and improved information to benefit all participants of the interconnection process.[86]

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[83] *Transmission Expansion Advisory Committee*, PJM Interconnection, L.L.C., https://www.pjm.com/committees-and-groups/committees/teac.aspx (last visited May 21, 2019) (presentations under meeting materials).

[84] PJM also proposes to add an additional language to Tariff, section 41 that clarifies when studies are considered completed. PJM proposes to specify that "an Interconnection Study is deemed complete on the date upon which the study itself is completed and a study report is provided to the Interconnection Customer and Interconnected Transmission Owner(s)." This clarification is consistent with Order No. 845-A, which clarified that "[p]ursuant to the study performance metrics established in Order No. 845, the Commission uses the period between the execution of an interconnection study agreement and *the date that the transmission provider provides the completed interconnection study to the interconnection customer* as a time period for comparison." Order No. 845-A at P 103 (emphasis added). In PJM the date that an Interconnection Customer is receives a study report is when PJM provides the Interconnection Study.

[85] Order No. 845 at P 191.

[86] Order No. 845 at P 191.

Finally, PJM requests one additional variance from the Commission provision set forth in *pro forma* LGIP, section 3.5.4 requiring that should any of the values calculated as prescribed in that section exceed 25 percent for two consecutive calendar quarters, Transmission Provider must report additional information for the next four consecutive calendar quarters and until the Transmission Provider reports four consecutive calendar quarters without such values exceeding 25 percent for two consecutive calendar quarters. Consistent with PJM's proposal to report its performance metrics over a six-month reporting period, PJM requests that it to comply with this additional reporting requirement PJM be required to report such additional information for the next two consecutive, six-month reporting periods, which would be the equivalent of the four reporting periods under the Final Rule. Basically, both those Transmission Providers that report quarterly and PJM would be required to report such additional information over an additional one-year period with the idea that the Transmission Providers would be able to show improvement over that one-year time period.

C. Revisions to Enhance the Interconnection Processes

Order No. 845 requires reforms designed to enhance the interconnection processes by making revisions to the *pro forma* LGIP and LGIA to allow requests for: (i) Interconnection Service below the full electrical generating capability; (ii) Provisional Interconnection Service; (iii) utilization of Surplus Interconnection Service; and (iv) Material Modification of the Interconnection Request to incorporate advanced technologies.[87]

[87] Order No. 845 at P 342.

1. Requesting Interconnection Service Below Generating Facility Capacity

Order No. 845 requires modifications to the *pro forma* LGIP to allow Interconnection Customers to request Interconnection Service below the full Generating Facility capacity,[88] recognizing the need for proper control technologies and penalties to ensure that the Generating Facility does not inject energy above the requested level of service.[89] Order No. 845 also provides that if the Transmission Provider determines, based on good utility practice and related engineering considerations and after accounting for the proposed control technology, that studies at the full Generating Facility's capability are necessary to ensure safety and reliability of the transmission system when an Interconnection Customer requests Interconnection Service that is lower than full Generating Facility capability, then it must provide a detailed explanation for such a determination in writing to the Interconnection Customer.[90] Order No. 845 further clarified that the Transmission Provider must inform the Interconnection Customer, after the Feasibility Study phase which studies (*e.g.*, steady-state, short circuit/fault duty and dynamic stability analysis) will be performed at which Generating Facility capability level.[91]

Consistent with changes proposed in Order No. 845 at the end of the *pro forma* LGIP, section 3.1, PJM proposes to add new section 36.1.1A to explicitly provide that Transmission Provider shall: (i) consider requests for service below a Generating Facility's full electrical

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[88] Under the *pro forma* LGIA, Article 1, the term Generating Facility capacity means "the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices. Because the term "capacity" has a specific, defined meaning unique to PJM's interconnection and market rules, PJM has replaced the reference to "generating facility capacity" with "generating facility capability."

[89] Order No. 845 at P 173.

[90] Order No. 845 at P 383.

[91] Order No. 845 at P 385.

generating capability; and (ii) study such requests at the level of service requested to identify required Interconnection Facilities and Network Upgrades but may study the facility at its full electric generating capability for safety and reliability. This new provision makes clear that Interconnection Customer will be responsible for all costs associated with the additional study and required upgrades. New section 36.1.1.A further provides that if the Transmission Provider determines additional network upgrades are necessary, Transmission Provider will: (i) specify which additional network upgrades are based on which studies; and (ii) provide a detailed explanation why the additional network upgrades are necessary. Consistent with Order No. 845, PJM proposes to add a new Schedule J (Requirements for Interconnection Service Below Full Electric Generating Capability) to its *pro forma* Interconnection Service Agreement (Tariff, Attachment O) to include any control technology and protections systems required for such interconnection.

PJM's current interconnection process requires Interconnection Customers requesting service below the full electrical generating capability of the Generating Facility,[92] to include all data relevant to their specific Interconnection Request on their Feasibility Study Data Form submitted via the PJM website.[93] The information requested on the Feasibility Study Data Form requires the Interconnection Customer to submit, among other things, the Generating Facility's total gross energy out, requested maximum facility output, as well as a description of any monitoring and control equipment the Interconnection Customer intends to install. To further

[92] Tariff, Part IV, section 36.1.01.g.

[93] *See* Interconnection Planning Department, *PJM Manual 14G (Generation Interconnection Requests)*, PJM Interconnection, L.L.C., Attachment A: Generation Interconnection Feasibility Study Data (Jan. 24, 2019), https://www.pjm.com/-/media/documents/manuals/m14g.ashx.

clarify that such information must be submitted with the Interconnection Request, PJM proposes to modify Tariff, Part IV, section 36.1.01(1)(g) to explicitly require Interconnection Customers to include, along with the additional information required to be submitted with a Generation Interconnection Request under subsection 36.1.01(g), a description of how the full electrical generating capability of the Generating Facility will be limited to the Maximum Facility Output requested.

In addition, PJM proposes to add language to Tariff, section 36.2 (Interconnection Feasibility Study),[94] sections 205.2 (Scope of Studies)[95] and 207 (Facilities Study Procedures)[96] to incorporate the Order No. 845 *pro forma* changes clarifying that requests for Interconnection Service below the Generating Facility's capability will be studied at the level of service requested unless the Transmission Provider is required to study the Generating Facility's full electrical capability due to safety and reliability concerns.

Order No. 845 further provides that an Interconnection Customer should be able to request reduced Interconnection Service after submitting an Interconnection Request and proposes revisions specific to such requests in the modification section of the *pro forma* LGIP. While PJM's

[94] Tariff, Part IV, section 36.2 *proposed.*

[95] Tariff, Part VI, section 205.2 *proposed.*

[96] Tariff, Part VI, section 207 *proposed.*

modifications provisions accepted by the Commission in Docket No. ER12-1177-000[97] differ from the Commission's *pro forma* timelines, PJM proposes revisions to section 36.2A.1, 36.2A.1.2, and 36.2A.2 that are in keeping with those required by Order No. 845. Specifically, PJM's proposed revisions make clear that an Interconnection Customer is able to request reduced Interconnection Service after submitting an Interconnection Request without losing its queue priority if it satisfies the Commission-accepted thresholds set forth in section 36.2A.1 and 36.2A.2.

2. Provisional Interconnection Service

Order No. 845 requires Transmission Providers to make changes to both their interconnection procedures and service agreements to allow Interconnection Customers to request Provisional Interconnection Service "when available studies or additional studies as necessary indicate there is a level of interconnection that can occur without additional Interconnection Facilities and/or Network Upgrades and the Interconnection Customer wishes to make use of that level of Interconnection Service while the facilities required for its full interconnection request are completed."[98] The Commission left it to the Transmission Provider to determine the frequency

[97] *PJM Interconnection, L.L.C.*, 139 FERC ¶ 61,079 (2012) (PJM proposed revisions to its modification provisions at Tariff, sections 36.2A.1 and 36.2A.2, to implement sliding queues to allow Interconnection Customer proposing modifications to its Interconnection Request to reduce the size of a project's electrical output or capability at various stages of the Interconnection Study process without losing its queue position. Under the sliding queue, an Interconnection Customer is permitted to modify the size of its Interconnection Request by as much as it wishes if the reduction is found not to be a Material Modification; however, if PJM identifies a Material Modification, a customer may reduce the size of its Interconnection Request up to a specific amount and "slide back" to the beginning of the next queue. If an Interconnection Customer slides back to the beginning of the next queue, it will retain its higher priority relative to other projects in the next queue. If an Interconnection Customer slides back to the beginning of the next queue, it will retain its higher priority relative to other projects in the next queue.). PJM is proposing revisions to the Tariff to include new sections 36.2A.1.3 and 36.2.2.1 as the sliding queue provisions are not applicable to requests for technological changes to include technology advancements.

[98] Order No. 845 at P 441.

for updating provisional Interconnection Studies.[99] Additionally, the modified *pro forma* LGIA, article 5.9.2, as proposed in the NOPR, clarifies Interconnection Customer's cost responsibility for the studies to be performed for Provisional Interconnection Service requests.

As stated in its comments to the NOPR, PJM does not believe it is necessary to use a separate Interconnection Service Agreement for Provisional Interconnection Service. PJM allows Provisional Interconnection Service today utilizing its *pro forma* Interconnection Service Agreement. To provide Provisional Interconnection Service, PJM studies an Interconnection Customer's Generating Facility in a manner that preserves queue priority, as appropriate, to determine if any system capability exists prior to completion of certain network upgrades. Provisional Interconnection Service is available to all Interconnection Customers in the PJM New Service Queue and is predicated on an Interconnection Customer's request that PJM perform the interim deliverability studies necessary to receive such service. Such request may be made at any point in the queue process. PJM determines when an interim deliverability study would be appropriate based on the interim period requested for the specific Generating Facility. Interconnection Customer is responsible for actual costs of the studies.

Thus, PJM proposes to modify its Tariff to include the *pro forma* definition of Provisional Interconnection Service,[100] but to replace the term "Provisional Large Generator Interconnection Agreement" with PJM's "Interconnection Service Agreement" consistent with PJM's practices.

> Provisional Interconnection Service shall mean interconnection service provided by Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to Transmission Provider's Transmission System

[99] Order No. 845 at PP 438, 448.

[100] All definitions included in the Tariff are incorporated by reference to the Interconnection Service Agreement at Appendix 1.

> and enabling that Transmission System to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Interconnection Service Agreement and, if applicable, the Tariff.

Additionally, PJM proposes not to include the definition of Provisional Large Generator Interconnection Agreement,[101] as PJM will provide for any Provisional Interconnection Service along with any regular Interconnection Service within one Interconnection Service Agreement, noting that the Provisional Interconnection Service is not permanent. In the Interconnection Service Agreement, PJM will provide the details of Provisional Interconnection Service, including level of available Provisional Interconnection Service and the period of time the Provisional Interconnection Service may be provided. Once the Provisional Interconnection Service ends under the terms of the Interconnection Service Agreement, the Interconnection Service Agreement remains in place to facilitate the regular Interconnection Service. Requiring Interconnection Customers to execute a separate Interconnection Service Agreement to accommodate Provisional Interconnection Service is unnecessary and inefficient. PJM has been providing Provisional Interconnection Service for years under uniform, nonconforming provisions of its *pro forma* Interconnection Service Agreement, accepted by the Commission and without issue.[102]

Therefore, PJM proposes to add Interconnection Service Agreement (Tariff, Attachment O), Appendix 2, section 1.4B to incorporate *pro forma* LGIA, article 5.9.2 with

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[101] Under Order No. 845, the Commission declined to require a separate *pro forma* Provisional Large Generator Interconnection Agreement. Order No. 845 at P 444.

[102] *See, e.g.*, *PJM Interconnection, L.L.C.*, Letter Order Accepting ISA With Nonconforming Interim Capacity Interconnection Rights, Docket No. ER19-1430-000 (May 9, 2019); *PJM Interconnection, L.L.C.*, Letter Order Accepting ISA With Nonconforming Interim Capacity Interconnection Rights, Docket No. ER19-143-000 (Dec. 4, 2018); *PJM Interconnection, L.L.C.*, Letter Order Accepting ISA With Nonconforming Interim Capacity Interconnection Rights, ER18-74-000 (Nov. 29, 2017); *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER17-2502-000 (Nov. 2, 2017).

modifications to allow PJM to issue one Interconnection Service Agreement that provides for Provisional Interconnection Service:

> Upon the request of Interconnection Customer, and prior to completion of requisite Interconnection Facilities, Network Upgrades, Local Upgrades, or system protection facilities Interconnection Customer may request limited Interconnection Service at the discretion of Transmission Provider based upon an evaluation that will consider the results of available studies, which terms shall be memorialized in the Interconnection Service Agreement. Transmission Provider shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if Interconnection Customer interconnects without modifications to the Generating Facility or Transmission System. Transmission Provider shall determine whether any Interconnection Facilities, Network Upgrades, Local Upgrades, or system protection facilities that are necessary to meet the requirements of NERC, or any applicable Regional Entity for the interconnection of a new, modified and/or expanded Generating Facility are in place prior to the commencement of Interconnection Service from the Generating Facility. Where available studies indicate that such Interconnection Facilities, Network Upgrades, Local Upgrades, and/or system protection facilities that are required for the interconnection of a new, modified and/or expanded Generating Facility are not currently in place, Transmission Provider will perform a study, at the Interconnection Customer's expense, to confirm the facilities that are required for Provisional Interconnection Service. Transmission Provider will include provisions in the Interconnection Service Agreement memorializing the Provisional Interconnection Service requested. Consistent with Tariff, section 212.4, Interconnection Customer may execute the Interconnection Service Agreement, request dispute resolution or request that the Interconnection Service Agreement be filed unexecuted with the Commission. The maximum permissible output of the Generating Facility shall be studied and updated on a frequency determined by Transmission Provider and at the Interconnection Customer's expense and documented in the Interconnection Service Agreement. Interconnection Customer assumes all risk and liabilities with respect to the Provisional Interconnection Service, including changes in output limits and Interconnection Facilities, Network Upgrades, Local Upgrades, and/or system protection facilities cost responsibilities.

3. Utilization of Surplus Interconnection Service—Proposed Independent Entity Variation

Order No. 845 adopted *pro forma* LGIP and LGIA provisions that enable a new Interconnection Customer to utilize the unused portion of an existing Interconnection Customer's

Interconnection Service within specific parameters.[103] Specifically, Order No. 845 proposed to add (i) a new definition for Surplus Interconnection Service to both the *pro forma* LGIP and LGIA; and (ii) a new section 3.3 to the *pro forma* LGIP that requires the Transmission Provider to establish a process for the use of Surplus Interconnection Service.[104] Order No. 845 also requires an expedited process to use or transfer Surplus Interconnection Service at the pre-existing Point of Interconnection at the existing Generating Facility.[105] The Commission contemplated that the expedited process takes place outside the interconnection queue.[106] Order No. 845 further provided for a limited continuation of Surplus Interconnection Service for up to one year following the retirement and permanent cessation of commercial operations of the original Interconnection Customer's Generating Facility.[107]

PJM seeks an independent entity variation to permit it to conduct an expedited process for Surplus Interconnection Service requests within its existing interconnection queue process. PJM believes that, given the PJM established procedures, the goals the Commission sought would be met far more effectively if undertaken through an expedited process within the interconnection queue process rather than outside of that process. Therefore, PJM proposes in this filing an

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[103] Order No. 845 at P 467; Order No. 845-A at P 119.

[104] Order No. 845 at P 467; Order No. 845-A at P 120.

[105] Order No. 845 at P 467; Order No. 845-A at P 121. The Commission emphasized that the use or transfer of Surplus Interconnection Service does not entail queue jumping. *See* Order No. 845 at PP 466, 487; Order No. 845-A at P 121.

[106] Order No. 845 at P 487; Order No. 845-A at P 121.

[107] Order No. 845 at P 506; Order No. 845-A at P 121. On rehearing Order No. 845-A clarified that it would be inconsistent with the definition of Surplus Interconnection Service to allow an Interconnection Customer to intentionally secure and utilize as surplus an amount of Interconnection Service in excess of the size of the generating facility that it constructs and continues to operate. Therefore, to avail itself of Order No. 845's Surplus Interconnection Service, "an original [I]nterconnection [C]ustomer can only secure interconnection service based on the generating facility capacity of the generating facility that it constructs and continues to operate." Order No. 845-A at P 146.

expedited process that allows the appropriate studies to be undertaken within its interconnection queue study process. Under the process proposed, the Interconnection Customer requesting Surplus Interconnection Service and the owner of the existing Generating Facility would enter into bilateral commercial arrangements while still providing defined rules and processes that other Interconnection Customers can take into account in assessing such a request on their particular project in the queue.[108]

To this end, PJM proposes revisions to its Tariff to incorporate Surplus Interconnection Service as part of its tariffed generation interconnection process by adding a new definition of Surplus Interconnection Service and revising Tariff, Part IV, section 36 to modify its existing generation interconnection procedures. Under PJM's proposed process, an Interconnection Customer desiring Surplus Interconnection Service would submit a Surplus Interconnection Service Request, would enter the Interconnection Study queue, and be assigned a Queue Position, but, would move through the queue under an expedited process. Thus, while not outside the interconnection queue process, PJM's processing of Surplus Interconnection Service would be consistent with Order No. 845. In addition and as described in more detail below, under PJM's proposal, should an Interconnection Customer's requested service not qualify as Surplus Interconnection Service, *e.g.*, the Surplus Interconnection Service could not be provided without the need for new network upgrades,[109] the Interconnection Customer could choose to retain its

[108] The concept is similar to interconnections by separate entities with multiple Generating Facilities behind the same Point of Interconnection who must enter into a Common Shared Facilities Agreement prior to executing an Interconnection Service Agreement. Such agreement is intended to address, among other things, the parties' rights and obligations as separate units using the same lead line behind the same Point of Interconnection.

[109] Order No. 845 at P 487.

queue priority and continue forward through the remaining study process as a zero megawatt Generating Facility at the same point of interconnection.

While PJM's proposal varies from the process Commission envisioned in Order No. 845, it appropriately reflects the policy established by the Commission in Order No. 845. In Order No. 845, the Commission expressly determined that it would continue to allow greater flexibility for RTOs to customize their interconnection procedures and agreements to fit regional needs consistent with variants allowed by Order No. 2003.[110] And, in response to rehearing requests, Order No. 845-A clarified that an independent entity variation applied to proposals for Interconnection Surplus Service as well.[111] Accordingly, PJM proposes two variations to the Tariff from the *pro forma* LGIP revisions required by the Commission in Order No. 845 for Surplus Interconnection Service.

Variation 1: PJM proposes an expedited process for Surplus Interconnection Service Requests within PJM's single, integrated New Service Queue

First, rather than providing an expedited process for Surplus Interconnection Service requests outside the interconnection queue, as directed in Order No. 845,[112] PJM proposes to use its existing queue construct to provide expedited processing of Surplus Interconnection Service requests.

This variation is appropriate because using PJM's existing queue process for expediting Surplus Interconnection Service requests, is consistent with the unique integrated nature of PJM's interconnection queue, will facilitate smooth implementation of the new process, and provides the

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[110] Order No. 845 at P 43 (citing Order No. 2003 at P 826).

[111] Order No. 845 at P 141.

[112] Order No. 845 at P 477.

option to generators to keep their queue priority if their request cannot be processed as a Surplus Interconnection Service request.

Although Order No. 2003-A[113] did not require Transmission Providers to maintain a single integrated queue for all interconnection and transmission service requests, in 2006 PJM added Tariff Part VI provisions[114] to combine the study and assignment of rights to customer-initiated projects[115] and transmission service requests under single, integrated queue.[116] The filing stemmed from: (i) the Commission's order in Docket No. ER06-1218-000 requiring PJM to file Tariff changes setting forth the process for granting incremental auction revenue rights pursuant to the Amended and Restated Operating Agreement, Schedule 1, section 7.8;[117] (ii) the Commission's order in Docket No. EL06-67-000, directing PJM to propose tariff provisions for determining priority as between merchant transmission projects and projects funded for transmission service requests;[118] and (iii) proposed tariff provisions implementing the Reliability Pricing Model

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[113] Order No. 2003-A required that queues for interconnection and delivery services must be closely coordinated so that Interconnection Customers and transmission delivery service customers would have equal access to available transmission capacity, with priority being established on a first come, first served basis according to the date on which service is requested. Also, Interconnection Studies for Interconnection Services should be coordinated with the Facilities Studies performed for transmission delivery services. *See* Order No. 2003-A at P 541.

[114] *See Chesapeake Transmission, L.L.C. v. PJM Interconnection, L.L.C.*, 116 FERC ¶ 61, 234 (2006), *order on compliance, PJM Interconnection, L.L.C.*, Letter Order, Docket Nos. ER07-344-000, EL06-67-001 (Feb. 8, 2007).

[115] Customer-initiated projects include large and small generation and transmission Interconnection Request and Upgrade Requests. *See Chesapeake Transmission, L.L.C. v. PJM Interconnection, L.L.C.*, 116 FERC ¶ 61,234, (2006), *order on compliance, PJM Interconnection, L.L.C.*, Letter Order, Docket Nos. ER07-344-000, EL06-67-001 (Feb. 8, 2007).

[116] Queue priority is based on a first come, first serve basis. An Interconnection Customer is assigned a position in the queue based upon the date that the customer's application is found to be valid. Thus, it is "an important baseline for the process that leads to an Interconnection Agreement." *Neptune Reg'l Transmission Sys., LLC. v. PJM Interconnection, L.L.C.*, 110 FERC ¶ 61,455 (2005).

[117] *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,220, at P 47 (2006).

[118] *Chesapeake Transmission, L.L.C. v. PJM Interconnection, L.L.C.*, 116 FERC ¶ 61,234, at P 37 (2006) (order denying Chesapeake Transmission, L.L.C.'s complaint).

settlement establishing a new type of right associated with incremental transmission capability.[119] PJM has conducted a single, integrated queue since 2006 with one exception.

In 2012, PJM revised its Tariff to include a separate queue process (*i.e.*, the alternate queue process) for small generation projects (less than 20 MW) satisfying certain screening criteria that demonstrate such small projects would not affect the transmission system.[120] The goal of the alternate queue process was to expedite the processing of both large and small generator Interconnection Requests. Under the alternate queue process, the small generation projects were required to submit an Interconnection Request. After the queue closed, PJM determined whether the projects in the queue qualified for alternate queue processing pursuant to Tariff, section 112C.[121] The projects that satisfied the screening criteria were studied in accordance with the alternate queue process. The projects were studied similar to the process as set forth for other Interconnection Requests but did not involve studies of the transmission system. By studying the qualifying small projects separately, PJM and its stakeholders anticipated that the interconnection of all projects—large and small—would be expedited. No such benefits were realized. PJM found that waiting until the queue closed resulted in a later completion of studies for projects in the alternate queue than if smaller projects had been evaluated on a sequential, on-going basis. Moreover, the screening process itself prolonged the planning process by creating an extra step for PJM because it had to conduct additional analysis and evaluation before it could begin the regular

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[119] *PJM Interconnection, L.L.C.*, Settlement Agreement, Docket Nos. ER05-1410-000 and EL05-148-000 (Sept. 29, 2006).

[120] *PJM Interconnection, L.L.C.*, Alternate Queue Proposal, Docket No. ER12-1177-000 (Feb. 29, 2012) ("Alternate Queue Proposal").

[121] Under the alternate queue process, PJM was required to study aggregate impacts of qualifying projects, which required PJM to wait for the queue to begin studies for projects in the alternate queue.

Interconnection Study process for the smaller projects. Accordingly, PJM proposed Tariff revisions to eliminate the alternate queue process and revert to using a single, integrated process, which were accepted by the Commission.[122]

Given the Commission directives requiring PJM to maintain a single, integrated queue for all new service requests and PJM's experience with its alternate queue process, PJM proposes a variation to provide an expedited process for Surplus Interconnection Service requests within PJM's single, integrated queue construct.

Pursuant to PJM's proposal, an Interconnection Customer seeking Surplus Interconnection Service must enter the interconnection queue by completing a Feasibility Study Agreement.[123] Feasibility Studies for Surplus Interconnection Service will be expedited by examining a limited contingency set that focuses on the impact of the Generating Facility on contingency limits in the vicinity of the resource. Once the Feasibility Study is completed, and the study results show that no Network Upgrades are required and there are no impacts affecting the determination of what upgrades are necessary for Interconnection Customers in the interconnection queue (*i.e.*, no use of existing headroom),[124] the Surplus Interconnection Service customer may move forward with an Interconnection Service Agreement. If, however, PJM cannot determine from the Feasibility Study whether Network Upgrades will be required or whether there are impacts affecting the determination of what upgrades are necessary for Interconnection Customers in the interconnection queue, a Feasibility Study report will be prepared and transmitted to the

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[122] *PJM Interconnection, L.L.C.*, Letter Order, Docket No. ER17-2232-000 (Sept. 11, 2017) (accepting Tariff revisions to eliminate the alternate queue process).

[123] Tariff, sections 111.1 and 112.1; Tariff, section 36.1.1B *proposed*.

[124] Order No. 845 at P 487; Order No. 845-A at PP 135, 138.

Interconnection Customer along with an executable System Impact Study Agreement.[125] At this point, the Interconnection Customer can decide whether to continue with its request in the regular interconnection queue study process or withdraw from the queue. This process will enable the Surplus Interconnection Service customer to retain its queue priority should its request not qualify for Surplus Interconnection Service.

PJM's Surplus Interconnection Service proposal provides a process very similar to the way PJM already studies small generator Interconnection Requests under Tariff, sections 111 and 112.[126] Both types of Interconnection Customers requesting to interconnect a small generator resource must enter the interconnection queue by completing a Feasibility Study Agreement and fulfilling all requirements thereunder. The Feasibility Studies for both types of service can be expedited in the same manner.[127] In addition, both types of Interconnection Requests proceed to the Interconnection Service Agreement stage without further study when no network impacts are identified and there are no other projects in the vicinity of the generator.[128] Proposing a process similar to one already used for small generators, for Surplus Interconnection Service will facilitate smooth implementation of the new process for Surplus Interconnection Service.

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[125] Tariff, section 36.1.1B *proposed*.

[126] Tariff, sections 111 and 112.

[127] Tariff, sections 111.2 and 11.2.2; Tariff, section 36.1.B.4(a) *proposed*.

[128] Tariff, sections 111.3 and 112.4; Tariff, section 36.1.B.4(b) *proposed*. The small generator interconnection process differs from the proposed Surplus Interconnection Service because at System Impact Study and Facilities Study stages, these studies "may" be foregone under certain circumstances, while under the Surplus Interconnection Service process, System Impact Studies and Facilities Studies are not performed unless the service requested is determined not to qualify as Surplus Interconnection Service, at which point, the Interconnection Customer can choose whether to continue forward with the standard study process.

A further advantage of processing Surplus Interconnection Requests using PJM's interconnection queue is enhanced transparency. Surplus Interconnection Service requests will be posted on the PJM website in the same manner as all other Interconnection Requests, which will enable other generators to access information regarding all Interconnection Requests easily in one place and on an equal basis. This also puts subsequent customers in the queue on notice of a request that may impact their Interconnection Requests should a Surplus Interconnection Request not qualify to proceed under the expedited process. This transparency, promotes more informed interconnection decisions.

Variation 2: If the Interconnection Request does not qualify for Surplus Interconnection Service, the Interconnection Customer May Retain its Queue Position and Proceed through the Interconnection Study Process as a Zero MW Generator

Second, PJM proposes a variance from the Order No. 845 language to allow the Interconnection Customer requesting Surplus Interconnection Service that does not qualify for such service to remain in the interconnection queue and continue through the remaining study processes as a zero MW Interconnection Request. This part of the proposal is possible because PJM's current interconnection process would be used for Surplus Interconnection Service.

Under PJM's proposal an Interconnection Customer requesting Surplus Interconnection Service receives a Queue Position in PJM's New Services Queue the same as any other Interconnection Request. Therefore, if after completing the Feasibility Study PJM determines that the requested service does not qualify as Surplus Interconnection Service, the Interconnection Customer already has a queue position, which allows it to move forward through the standard Interconnection Study process without having to re-enter the queue with a new Interconnection Request. This creates a more efficient process for Interconnection Customers who want to

continue with their same queue position despite not qualifying for Surplus Interconnection Service.[129]

This concept is modeled on the Fast Track Process available to certified small Generating Facilities no larger than 2 MW under Order No. 2006.[130] Specifically, under that process if the proposed interconnection passes the screening criteria, the Transmission Provider offers the Interconnection Customer a small generator interconnection agreement, without any further study. Similarly, if the Interconnection Request fails the screening criteria but the Transmission Provider determines based on a supplemental review that the small Generating Facility may nevertheless be interconnected without affecting safety and reliability, the Transmission Provider can also offer the Interconnection Customer a small generator interconnection agreement. However, if after performing a supplemental review the Transmission Provider continues to be unsure whether the proposed interconnection will degrade the safety and reliability of the system, the Interconnection Request will continue to be evaluated using the Feasibility, System Impact, and Facilities studies, followed by the execution of an Interconnection Service Agreement. Following a similar construct for Surplus Interconnection Service allows Interconnection Customers to take advantage of an expedited interconnection process consistent with Order No. 845, while also having the flexibility to continue with its request without having to re-enter the queue with a new Interconnection Request and a new queue priority.

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[129] In the event that an Interconnection Customer continues in the interconnection process as a zero MW request after not qualifying for Surplus Interconnection Service and is responsible for Network Upgrades, it will receive any rights associated with those upgrades as any other Interconnection Customer would receive pursuant to the Tariff, Part VI.

[130] *Standardization of Small Generator Interconnection Agreements and Procedures*, Order No. 2006, 111 FERC ¶ 61,220, at P 45, *order on reh'g*, Order No. 2006-A, 113 FERC ¶ 61,195 (2005), *order on clarification*, Order No. 2006-B, 116 FERC ¶ 61,046 (2006).

Aside from these two variations, PJM's proposal comports with the Order No. 845 requirements regarding Surplus Interconnection Service.

4. Material Modification and Incorporation of Advanced Technologies

Order No. 845 requires Transmission Providers to develop and incorporate in their interconnection processes a technological change procedure to "assess, and if necessary, study whether proposed technological advancements can be incorporated into interconnection requests without triggering the Material Modification provisions of the *pro forma* LGIP."[131] Order No. 845 also required that Transmission Providers develop a definition of permissible technological advancements that, by definition, is not a Material Modification.[132]

While PJM believes that its Tariff modification provisions could permit an Interconnection Customer to request a change to an Interconnection Request, such a technological advancement,[133] PJM proposes to include revisions within the context of its current tariffed modification provisions to clarify how requests for technological changes will be processed. To that end, PJM proposes to modify its Tariff to add the following new definition of permissible technological advancements.[134]

> **Permissible Technological Advancement** shall mean a proposed technological change such as a change to turbines, inverters, or plant supervisory controls or other similar advancements to the technology proposed in the Interconnection Request that is submitted to the Transmission Provider with an executed System Impact Study Agreement. Such change may not: (i) increase the capability of the

[131] Order No. 845 at P 518. Such process must specify what information must be submitted as part of a technological advancement request, what technological advancements can be incorporated at various stages of the interconnection process, and the conditions under which a study will or will not be necessary to assess whether a proposed technological advancement is a Material Modification. Order No. 845 at P 519.

[132] Order No. 845 at P 518.

[133] Order No. 845 at P 524.

[134] Tariff, OATT Definitions O-P-Q *proposed.*

> Generating Facility as specified in the original Interconnection Request; and (ii) represent a different fuel type from the original Interconnection Request. Any proposed technological change submitted after an executed System Impact Study Agreement is received by the Transmission Provider shall be considered a Permissible Technological Advancement only if it is not deemed to be a Material Modification pursuant to Tariff, Part IV, section 36.2A.3.

Consistent with Order No. 845, the above proposed definition of permissible technological advancements clearly identifies the type of technological advancements that may be accommodated because they do not require extensive or additional studies to determine whether such a change is a Material Modification. This list of technology advancements was taken from Order No. 845.[135]

To further clarify how PJM will apply Permissible Technological Advancements requests in the context of its interconnection process, PJM proposes to modify its Tariff to add a new section 36.2A.1.3, which will read as follows:

> At the time the Interconnection Customer submits an executed System Impact Study Agreement, the Interconnection Customer may modify its Interconnection Request to include a Permissible Technological Advancement without losing its current Queue Position by submitting the new data associated with such Permissible Technological Advancement via the PJM website, as specified in the PJM Manuals.

If the Interconnection Customer submits its request to modify its Interconnection Request to include a technological advancement after submitting an executed System Impact Study Agreement, PJM proposes to add a new section 36.2A.2.1, which will read as follows:

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[135] Order No. 845 at 530. Consistent with PJM's implementation of its current modification provision, the Commission clarified that changes between wind and solar technologies should not be treated as a non-material modification because such changes involve a change in the electrical characteristic of an interconnection request. The Commission further stated that "the definition of permissible technological advancements must not include changes in generation technology or fuel type (e.g., from gas to wind [or wind/solar to battery]) because they involved a change in the electrical characteristics of an interconnection request." Order No. 845 at P 530 (footnote omitted).

> For a request to modify an Interconnection Request to include a technological advancement after returning the executed System Impact Study Agreement but prior to executing an Interconnection Service Agreement, an Interconnection Customer may request in writing to modify its Interconnection Request to add a technological advancement. Such request will be evaluated by the Transmission Provider consistent with Tariff, Part IV, section 36.2A.3 to determine whether such change would constitute a Material Modification. If the Transmission Provider determines that the technological advancement is not a Material Modification, the Interconnection Customer may retain its current Queue Position. If the Transmission Provider determines the change is a Material Modification, the Interconnection Customer must withdraw its technological advancement change request to retain its Queue Position. In the event a study is necessary, section 36.2A.4 shall apply.

PJM does not propose to include any additional changes to its Tariff as section 36.2A.4 provides that if a study is necessary PJM shall commence and perform it "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." Specifically, section 36.2A.4 provides:

> 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.

Finally, although Order No. 845 requires that PJM modify its Tariff to require a refundable deposit in the amount of $10,000, or an alternative amount, to study a request to modify the Interconnection Request to accommodate a technological advancement,[136] PJM performs such

[136] Order No. 845 at P 534.

studies using the deposit provided for the study phase in which the modification is requested. Given PJM has found no need to request an additional deposit for such studies to date, allowing PJM to continue its practices would be more administratively efficient for PJM and less costly for the Interconnection Customer, who has already provided a deposit to cover the study costs. In the end, the Tariff provides that the Interconnection Customer is responsible for actual costs. Additionally, the Tariff requires that all study costs must be paid before the Interconnection Customer is able to move to the next study phase.

IV. EFFECTIVE DATE

Order No. 845-A found that in light of the confusion created by multiple motions and rehearing requests pertaining to the effective dates for the revisions required by Order No. 845 and Order No. 845-A, the effective date of the revisions proposed in the each RTO's compliance filing "shall be the date established in the Commission's order accepting that RTO's/ISO's compliance filing, which will be no earlier than the issuance date of such order."[137] Based on that determination, PJM requests the Commission allow for an effective date to coincide with the beginning of the next interconnection queue after issuance of the Commission's Order accepting PJM's proposed revisions, but no earlier than the queue commencing April 1, 2020. Such effective date will allow the proposed revisions to coincide with the beginning of the next New Services Queue. Additionally, it will allow PJM to implement necessary changes in several PJM applications required as a result of some of the new revisions proposed, in this particular, the new Surplus Interconnection Service. PJM recognizes this compliance date may be later than the

[137] Order No. 845-A at P 166.

effective date proposed under the Final Rule; however, PJM believes that good cause exists for allowing the proposed revisions proffered herein to take effect no sooner than the opening of the next New Services Queue after the Commission's Order issues accepting PJM's proposed revisions. Importantly, implementing the revised procedures on an effective date outside the commencement of the next New Service Queues that opens after the Commission's order accepting PJM's compliance filing issues would subject some current PJM interconnection queue projects to the new procedures while those in the same queue prior to an Order No. 845 effective date would be subject to the prior procedures. Moving the compliance date to coincide with the beginning of the next New Services Queue not only is administratively easier for PJM to implement, but also ensures that all prospective Interconnection Customers within their respective interconnection queues are treated similarly. The Commission has granted similar requests for variances in the past to allow PJM compliance filings to coincide with the beginning of the next New Services Queue.[138]

V. DOCUMENTS ENCLOSED

This filing consists of the following documents:

a. This Transmittal Letter;

b. Attachment A: Proposed revisions to Tariff (in redlined format); and

c. Attachment B: Proposed revisions to Tariff (in clean format).

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[138] *See, e.g.*, *PJM Interconnection, L.L.C.*, Order on Compliance Filing, Docket No. ER14-2590-000 (Dec. 19, 2014); *see also PJM Interconnection, L.L.C.*, Letter Order on Compliance Filing for Order Nos. 827 and 828, Docket No. ER17-108-000 (Jan. 5, 2017).

VI. COMMUNICATIONS

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

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VII. SERVICE

PJM has served a copy of this filing on all PJM Members and on all state utility regulatory commissions in the PJM Region by posting this filing electronically. In accordance with the Commission's regulations,[139] PJM will post a copy of this filing to the FERC filings sections of its internet site, located at the following link: http://www.pjm.com/documents/ferc-manuals.aspx with a specific link to the newly-filed document, and will send via electronic mail on the same date

[139] *See* 18 C.F.R. §§ 35.2(e) and 385.2010(f)(3).

as this filing to all PJM Members and all state utility regulatory commissions in the PJM Region[140] alerting them that this filing has been made by PJM today and is available by following such link.

VIII. CONCLUSION

PJM respectfully requests that the Commission accept this compliance filing in its entirety without modification as compliant with Order No. 845.

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[140] PJM already maintains, updates, and regularly uses electronic mail lists for all PJM Members and affected commissions.

Attachment A

Revisions to the
PJM Open Access Transmission Tariff,
and
PJM Reliability Assurance Agreement

(Marked / Redline Format)

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PJM Open Access Transmission Tariff

(Marked / Redline Format)

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Definitions – C-D

Canadian Guaranty:

"Canadian Guaranty" shall mean a Corporate Guaranty provided by an Affiliate of a Participant that is domiciled in Canada, and meets all of the provisions of Tariff, Attachment Q.

Cancellation Costs:

"Cancellation Costs" shall mean costs and liabilities incurred in connection with: (a) cancellation of supplier and contractor written orders and agreements entered into to design, construct and install Attachment Facilities, Direct Assignment Facilities and/or Customer-Funded Upgrades, and/or (b) completion of some or all of the required Attachment Facilities, Direct Assignment Facilities and/or Customer-Funded Upgrades, or specific unfinished portions and/or removal of any or all of such facilities which have been installed, to the extent required for the Transmission Provider and/or Transmission Owner(s) to perform their respective obligations under Tariff, Part IV and/or Tariff, Part VI.

Capacity:

"Capacity" shall mean the installed capacity requirement of the Reliability Assurance Agreement or similar such requirements as may be established.

Capacity Emergency Transfer Limit:

"Capacity Emergency Transfer Limit" or "CETL" shall have the meaning provided in the Reliability Assurance Agreement.

Capacity Emergency Transfer Objective:

"Capacity Emergency Transfer Objective" or "CETO" shall have the meaning provided in the Reliability Assurance Agreement.

Capacity Export Transmission Customer:

"Capacity Export Transmission Customer" shall mean a customer taking point to point transmission service under Tariff, Part II to export capacity from a generation resource located in the PJM Region that has qualified for an exception to the RPM must-offer requirement as described in Tariff, Attachment DD, section 6.6(g).

Capacity Import Limit:

"Capacity Import Limit" shall have the meaning provided in the Reliability Assurance Agreement.

Capacity Interconnection Rights:

"Capacity Interconnection Rights" shall mean the rights to input generation as a Generation Capacity Resource into the Transmission System at the Point of Interconnection where the generating facilities connect to the Transmission System.

Capacity Market Buyer:

"Capacity Market Buyer" shall mean a Member that submits bids to buy Capacity Resources in any Incremental Auction.

Capacity Market Seller:

"Capacity Market Seller" shall mean a Member that owns, or has the contractual authority to control the output or load reduction capability of, a Capacity Resource, that has not transferred such authority to another entity, and that offers such resource in the Base Residual Auction or an Incremental Auction.

Capacity Performance Resource:

"Capacity Performance Resource" shall mean a Capacity Resource as described in Tariff, Attachment DD, section 5.5A(a).

Capacity Performance Transition Incremental Auction:

"Capacity Performance Transition Incremental Auction" shall have the meaning specified in Tariff, Attachment DD, section 5.14D.

Capacity Resource:

"Capacity Resource" shall have the meaning provided in the Reliability Assurance Agreement.

Capacity Resource Clearing Price:

"Capacity Resource Clearing Price" shall mean the price calculated for a Capacity Resource that offered and cleared in a Base Residual Auction or Incremental Auction, in accordance with Tariff, Attachment DD, section 5.

Capacity Storage Resource:

"Capacity Storage Resource" shall mean any Energy Storage Resource that participates in the Reliability Pricing Model or is otherwise treated as capacity in PJM's markets such as through a Fixed Resource Requirement Capacity Plan.

Capacity Transfer Right:

"Capacity Transfer Right" shall mean a right, allocated to LSEs serving load in a Locational Deliverability Area, to receive payments, based on the transmission import capability into such Locational Deliverability Area, that offset, in whole or in part, the charges attributable to the Locational Price Adder, if any, included in the Zonal Capacity Price calculated for a Locational Delivery Area.

Capacity Transmission Injection Rights:

"Capacity Transmission Injection Rights" shall mean the rights to schedule energy and capacity deliveries at a Point of Interconnection of a Merchant Transmission Facility with the Transmission System. Capacity Transmission Injection Rights may be awarded only to a Merchant D.C. Transmission Facility and/or Controllable A.C. Merchant Transmission Facilities that connects the Transmission System to another control area. Deliveries scheduled using Capacity Transmission Injection Rights have rights similar to those under Firm Point-to-Point Transmission Service or, if coupled with a generating unit external to the PJM Region that satisfies all applicable criteria specified in the PJM Manuals, similar to Capacity Interconnection Rights.

Cold/Warm/Hot Notification Time:

"Cold/Warm/Hot Notification Time" shall mean the time interval between PJM notification and the beginning of the start sequence for a generating unit that is currently in its cold/warm/hot temperature state. The start sequence may include steps such as any valve operation, starting feed water pumps, startup of auxiliary equipment, etc.

Cold/Warm/Hot Start-up Time:

For all generating units that are not combined cycle units, "Cold/Warm/Hot Start-up Time" shall mean the time interval, measured in hours, from the beginning of the start sequence to the point after generator breaker closure, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero for a generating unit in its cold/warm/hot temperature state. For combined cycle units, "Cold/Warm/Hot Start-up Time" shall mean the time interval from the beginning of the start sequence to the point after first combustion turbine generator breaker closure in its cold/warm/hot temperature state, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero. For all generating units, the start sequence may include steps such as any valve operation, starting feed water pumps, startup of auxiliary equipment, etc. Other more detailed actions that could signal the beginning of the start sequence could include, but are not limited to, the operation of pumps, condensers, fans, water chemistry evaluations, checklists, valves, fuel systems, combustion turbines, starting engines or systems, maintaining stable fuel/air ratios, and other auxiliary equipment necessary for startup.

Cold Weather Alert:

"Cold Weather Alert" shall mean the notice that PJM provides to PJM Members, Transmission Owners, resource owners and operators, customers, and regulators to prepare personnel and facilities for expected extreme cold weather conditions.

Collateral:

"Collateral" shall be a cash deposit, including any interest, or letter of credit in an amount and form determined by and acceptable to PJMSettlement, provided by a Participant to PJMSettlement as security in order to participate in the PJM Markets or take Transmission Service.

Collateral Call:

"Collateral Call" shall mean a notice to a Participant that additional Collateral, or possibly early payment, is required in order to remain in, or to regain, compliance with Tariff, Attachment Q.

Commencement Date:

"Commencement Date" shall mean the date on which Interconnection Service commences in accordance with an Interconnection Service Agreement.

Committed Offer:

The "Committed Offer" shall mean 1) for pool-scheduled resources, an offer on which a resource was scheduled by the Office of the Interconnection for a particular clock hour for an Operating Day, and 2) for self-scheduled resources, either the offer on which the Market Seller has elected to schedule the resource or the applicable offer for the resource determined pursuant to Operating Agreement, Schedule 1, section 6.4, or Operating Agreement, Schedule 1, section 6.6 for a particular clock hour for an Operating Day.

Completed Application:

"Completed Application" shall mean an application that satisfies all of the information and other requirements of the Tariff, including any required deposit.

Compliance Aggregation Area (CAA):

"Compliance Aggregation Area" or "CAA" shall mean a geographic area of Zones or sub-Zones that are electrically-contiguous and experience for the relevant Delivery Year, based on Resource Clearing Prices of, for Delivery Years through May 31, 2018, Annual Resources and for the 2018/2019 Delivery Year and subsequent Delivery Years, Capacity Performance Resources, the same locational price separation in the Base Residual Auction, the same locational price separation in the First Incremental Auction, the same locational price separation in the Second Incremental Auction, the same locational price separation in the Third Incremental Auction.

Conditional Incremental Auction:

"Conditional Incremental Auction" shall mean an Incremental Auction conducted for a Delivery Year if and when necessary to secure commitments of additional capacity to address reliability criteria violations arising from the delay in a Backbone Transmission upgrade that was modeled in the Base Residual Auction for such Delivery Year.

CONE Area:

"CONE Area" shall mean the areas listed in Tariff, Attachment DD, section 5.10(a)(iv)(A) and any LDAs established as CONE Areas pursuant to Tariff, Attachment DD, section 5.10(a)(iv)(B).

Confidential Information:

"Confidential Information" shall mean any confidential, proprietary, or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy, or compilation relating to the present or planned business of a New Service Customer, Transmission Owner, or other Interconnection Party or Construction Party, which is designated as confidential by the party supplying the information, whether conveyed verbally, electronically, in writing, through inspection, or otherwise, and shall include, without limitation, all information relating to the producing party's technology, research and development, business affairs and pricing, and any information supplied by any New Service Customer, Transmission Owner, or other Interconnection Party or Construction Party to another such party prior to the execution of an Interconnection Service Agreement or a Construction Service Agreement.

Congestion Price:

"Congestion Price" shall mean the congestion component of the Locational Marginal Price, which is the effect on transmission congestion 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 line loadings, calculated as specified in Operating Agreement, Schedule 1, section 2, and the parallel provisions of Tariff, Attachment K-Appendix, section 2.

Consolidated Transmission Owners Agreement, PJM Transmission Owners Agreement or Transmission Owners Agreement:

"Consolidated Transmission Owners Agreement," "PJM Transmission Owners Agreement" or "Transmission Owners Agreement" shall mean the certain Consolidated Transmission Owners Agreement dated as of December 15, 2005, by and among the Transmission Owners and by and between the Transmission Owners and PJM Interconnection, L.L.C. on file with the Commission, as amended from time to time.

Constraint Relaxation Logic:

"Constraint Relaxation Logic" shall mean the logic applied in the market clearing software where the transmission limit is increased to prevent the Transmission Constraint Penalty Factor from setting the Marginal Value of a transmission constraint.

Constructing Entity:

"Constructing Entity" shall mean either the Transmission Owner or the New Services Customer, depending on which entity has the construction responsibility pursuant to Tariff, Part VI and the applicable Construction Service Agreement; this term shall also be used to refer to an Interconnection Customer with respect to the construction of the Customer Interconnection Facilities.

Construction Party:

"Construction Party" shall mean a party to a Construction Service Agreement. "Construction Parties" shall mean all of the Parties to a Construction Service Agreement.

Construction Service Agreement:

"Construction Service Agreement" shall mean either an Interconnection Construction Service Agreement or an Upgrade Construction Service Agreement.

Contingent Facilities:

"Contingent Facilities" shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request's costs, timing, and study findings are dependent and, if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

Control Area:

"Control Area" shall mean an electric power system or combination of electric power systems bounded by interconnection metering and telemetry to which a common automatic generation control scheme is applied in order to:

(1) match the power output of the generators within the electric power system(s) and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);

(2) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;

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

(4) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

Control Zone:

"Control Zone" shall have the meaning given in the Operating Agreement.

Controllable A.C. Merchant Transmission Facilities:

"Controllable A.C. Merchant Transmission Facilities" shall mean transmission facilities that (1) employ technology which Transmission Provider reviews and verifies will permit control of the amount and/or direction of power flow on such facilities to such extent as to effectively enable the controllable facilities to be operated as if they were direct current transmission facilities, and (2) that are interconnected with the Transmission System pursuant to Tariff, Part IV and Tariff, Part VI.

Coordinated External Transaction:

"Coordinated External Transaction" shall mean a transaction to simultaneously purchase and sell energy on either side of a CTS Enabled Interface in accordance with the procedures of Operating Agreement, Schedule 1, section 1.13, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.13.

Coordinated Transaction Scheduling:

"Coordinated Transaction Scheduling" or "CTS" shall mean the scheduling of Coordinated External Transactions at a CTS Enabled Interface in accordance with the procedures of Operating Agreement, Schedule 1, section 1.13, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.13.

Corporate Guaranty:

"Corporate Guaranty" shall mean a legal document used by an entity to guaranty the obligations of another entity.

Cost of New Entry:

"Cost of New Entry" or "CONE" shall mean the nominal levelized cost of a Reference Resource, as determined in accordance with Tariff, Attachment DD, section 5.

Costs:

As used in Tariff, Part IV, Tariff, Part VI and related attachments, "Costs" shall mean costs and expenses, as estimated or calculated, as applicable, including, but not limited to, capital expenditures, if applicable, and overhead, return, and the costs of financing and taxes and any Incidental Expenses.

Counterparty:

"Counterparty" shall mean PJMSettlement as the contracting party, in its name and own right and not as an agent, to an agreement or transaction with a Market Participant or other entities, including the agreements and transactions with customers regarding transmission service and other transactions under the PJM Tariff and the Operating Agreement. PJMSettlement shall not be a counterparty to (i) any bilateral transactions between Members, or (ii) any Member's self-supply of energy to serve its load, or (iii) any Member's self-schedule of energy reported to the Office of the Interconnection to the extent that energy serves that Member's own load .

Credit Available for Export Transactions:

"Credit Available for Export Transactions" shall mean a designation of credit to be used for Export Transactions that is allocated by each Market Participant from its Credit Available for Virtual Transactions, and which reduces the Market Participant's Credit Available for Virtual Transactions accordingly.

Credit Available for Virtual Transactions:

"Credit Available for Virtual Transactions" shall mean the Market Participant's Working Credit Limit for Virtual Transactions calculated on its credit provided in compliance with its Peak Market Activity requirement plus available credit submitted above that amount, less any unpaid billed and unbilled amounts owed to PJMSettlement, plus any unpaid unbilled amounts owed by PJMSettlement to the Market Participant, less any applicable credit required for Minimum Participation Requirements, FTRs, RPM activity, or other credit requirement determinants as defined in Tariff, Attachment Q.

Credit Breach:

"Credit Breach" shall mean the status of a Participant that does not currently meet the requirements of Tariff, Attachment Q or other provisions of the Agreements.

Credit-Limited Offer:

"Credit-Limited Offer" shall mean a Sell Offer that is submitted by a Market Participant in an RPM Auction subject to a maximum credit requirement specified by such Market Participant.

Credit Score:

"Credit Score" shall mean a composite numerical score scaled from 0-100 as calculated by PJMSettlement that incorporates various predictors of creditworthiness.

CTS Enabled Interface:

"CTS Enabled Interface" shall mean an interface between the PJM Control Area and an adjacent Control Area at which the Office of the Interconnection has authorized the use of Coordinated Transaction Scheduling ("CTS"). The CTS Enabled Interfaces between the PJM Control Area and the New York Independent System Operator, Inc. Control Area shall be designated in the Joint Operating Agreement Among and Between New York Independent System Operator Inc. and PJM Interconnection, L.L.C., Schedule A (PJM Rate Schedule FERC No. 45). The CTS Enabled Interfaces between the PJM Control Area and the Midcontinent Independent System Operator, Inc. shall be designated consistent with Attachment 3, section 2 of the Joint Operating Agreement between Midcontinent Independent System Operator, Inc. and PJM Interconnection, L.L.C.

CTS Interface Bid:

"CTS Interface Bid" shall mean a unified real-time bid to simultaneously purchase and sell energy on either side of a CTS Enabled Interface in accordance with the procedures of Operating Agreement, Schedule 1, section 1.13, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.13.

Curtailment:

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

Curtailment Service Provider:

"Curtailment Service Provider" or "CSP" shall mean a Member or a Special Member, which action on behalf of itself or one or more other Members or non-Members, participates in the PJM Interchange Energy Market, Ancillary Services markets, and/or Reliability Pricing Model by causing a reduction in demand.

Customer Facility:

"Customer Facility" shall mean ~~generation facilities~~Generation Facilities or Merchant Transmission Facilities interconnected with or added to the Transmission System pursuant to an Interconnection Request under Tariff, Part IV~~, subpart A~~.

Customer-Funded Upgrade:

"Customer-Funded Upgrade" shall mean any Network Upgrade, Local Upgrade, or Merchant Network Upgrade for which cost responsibility (i) is imposed on an Interconnection Customer or an Eligible Customer pursuant to Tariff, Part VI, section 217, or (ii) is voluntarily undertaken by a New Service Customer in fulfillment of an Upgrade Request. No Network Upgrade, Local Upgrade or Merchant Network Upgrade or other transmission expansion or enhancement shall be a Customer-Funded Upgrade if and to the extent that the costs thereof are included in the rate base of a public utility on which a regulated return is earned.

Customer Interconnection Facilities:

"Customer Interconnection Facilities" shall mean all facilities and equipment owned and/or controlled, operated and maintained by Interconnection Customer on Interconnection Customer's side of the Point of Interconnection identified in the appropriate appendices to the Interconnection Service Agreement and to the Interconnection Construction Service Agreement, including any modifications, additions, or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Customer Facility with the Transmission System.

Daily Deficiency Rate:

"Daily Deficiency Rate" shall mean the rate employed to assess certain deficiency charges under Tariff, Attachment DD, section 7, Tariff, Attachment DD, section 8, Tariff, Attachment DD, section 9, or Tariff, Attachment DD, section 13.

Daily Unforced Capacity Obligation:

"Daily Unforced Capacity Obligation" shall mean the capacity obligation of a Load Serving Entity during the Delivery Year, determined in accordance with Reliability Assurance Agreement, Schedule 8, or, as to an FRR entity, in Reliability Assurance Agreement, Schedule 8.1.

Day-ahead Congestion Price:

"Day-ahead Congestion Price" shall mean the Congestion Price resulting from the Day-ahead Energy Market.

Day-ahead Energy Market:

"Day-ahead Energy Market" shall mean the schedule of commitments for the purchase or sale of energy and payment of Transmission Congestion Charges developed by the Office of the Interconnection as a result of the offers and specifications submitted in accordance with Operating Agreement, Schedule 1, section 1.10 and the parallel provisions of Tariff, Attachment K-Appendix, section 1.10.

Day-ahead Energy Market Injection Congestion Credits:

"Day-ahead Energy Market Injection Congestion Credits" shall mean those congestion credits paid to Market Participants for supply transactions in the Day-ahead Energy Market including generation schedules, Increment Offers, Up-to Congestion Transactions, import transactions, and Day-Ahead Pseudo-Tie Transactions.

Day-ahead Energy Market Transmission Congestion Charges:

"Day-ahead Energy Market Transmission Congestion Charges" shall be equal to the sum of Day-ahead Energy Market Withdrawal Congestion Charges minus [the sum of Day-ahead Energy Market Injection Congestion Credits plus any congestion charges calculated pursuant to the Joint Operating Agreement between the Midcontinent Independent Transmission System Operator, Inc. and PJM Interconnection, L.L.C. (PJM Rate Schedule FERC No. 38), plus any congestion charges calculated pursuant to the Joint Operating Agreement Among and Between New York Independent System Operator Inc. and PJM Interconnection, L.L.C. (PJM Rate Schedule FERC No. 45), plus any congestion charges calculated pursuant to agreements between the Office of the Interconnection and other entities, as applicable)].

Day-ahead Energy Market Withdrawal Congestion Charges:

"Day-ahead Energy Market Withdrawal Congestion Charges" shall mean those congestion charges collected from Market Participants for withdrawal transactions in the Day-ahead Energy Market from transactions including Demand Bids, Decrement Bids, Up-to Congestion Transactions, Export Transactions, and Day-Ahead Pseudo-Tie Transactions.

Day-ahead Loss Price:

"Day-ahead Loss Price" shall mean the Loss Price resulting from the Day-ahead Energy Market.

Day-ahead Prices:

"Day-ahead Prices" shall mean the Locational Marginal Prices resulting from the Day-ahead Energy Market.

Day-Ahead Pseudo-Tie Transaction:

"Day-Ahead Pseudo-Tie Transaction" shall mean a transaction scheduled in the Day-ahead Energy Market to the PJM-MISO interface from a generator within the PJM balancing authority area that Pseudo-Ties into the MISO balancing authority area.

Day-ahead Settlement Interval:

"Day-ahead Settlement Interval" shall mean the interval used by settlements, which shall be every one clock hour.

Day-ahead System Energy Price:

"Day-ahead System Energy Price" shall mean the System Energy Price resulting from the Day-ahead Energy Market.

Deactivation:

"Deactivation" shall mean the retirement or mothballing of a generating unit governed by Tariff, Part V.

Deactivation Avoidable Cost Credit:

"Deactivation Avoidable Cost Credit" shall mean the credit paid to Generation Owners pursuant to Tariff, Part V, section 114.

Deactivation Avoidable Cost Rate:

"Deactivation Avoidable Cost Rate" shall mean the formula rate established pursuant to Tariff, Part V, section 115 .

Deactivation Date:

"Deactivation Date" shall mean the date a generating unit within the PJM Region is either retired or mothballed and ceases to operate.

Decrement Bid:

"Decrement Bid" shall mean a type of Virtual Transaction that is a bid to purchase energy at a specified location in the Day-ahead Energy Market. A cleared Decrement Bid results in scheduled load at the specified location in the Day-ahead Energy Market.

Default:

As used in the Interconnection Service Agreement and Construction Service Agreement, "Default" shall mean the failure of a Breaching Party to cure its Breach in accordance with the applicable provisions of an Interconnection Service Agreement or Construction Service Agreement.

Delivering Party:

"Delivering Party" shall mean the entity supplying capacity and energy to be transmitted at Point(s) of Receipt.

Delivery Year:

"Delivery Year" shall mean the Planning Period for which a Capacity Resource is committed pursuant to the auction procedures specified in Tariff, Attachment DD, or pursuant to an FRR Capacity Plan under Reliability Assurance Agreement, Schedule 8.1.

Demand Bid:

"Demand Bid" shall mean a bid, submitted by a Load Serving Entity in the Day-ahead Energy Market, to purchase energy at its contracted load location, for a specified timeframe and megawatt quantity, that if cleared will result in energy being scheduled at the specified location

in the Day-ahead Energy Market and in the physical transfer of energy during the relevant Operating Day.

Demand Bid Limit:

"Demand Bid Limit" shall mean the largest MW volume of Demand Bids that may be submitted by a Load Serving Entity for any hour of an Operating Day, as determined pursuant to Operating Agreement, Schedule 1, section 1.10.1B, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.10.1B.

Demand Bid Screening:

"Demand Bid Screening" shall mean the process by which Demand Bids are reviewed against the applicable Demand Bid Limit, and rejected if they would exceed that limit, as determined pursuant to Operating Agreement, Schedule 1, section 1.10.1B, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.10.1B.

Demand Resource:

"Demand Resource" shall mean a resource with the capability to provide a reduction in demand.

Demand Resource Factor or DR Factor:

"Demand Resource Factor" or ("DR Factor") shall have the meaning specified in the Reliability Assurance Agreement.

Designated Agent:

"Designated Agent" shall mean any entity that performs actions or functions on behalf of the Transmission Provider, a Transmission Owner, an Eligible Customer, or the Transmission Customer required under the Tariff.

Designated Entity:

"Designated Entity" shall have the same meaning provided in the Operating Agreement.

Direct Assignment Facilities:

"Direct Assignment Facilities" shall mean facilities or portions of facilities that are constructed for the sole use/benefit of a particular Transmission Customer requesting service under the Tariff. Direct Assignment Facilities shall be specified in the Service Agreement that governs service to the Transmission Customer and shall be subject to Commission approval.

Direct Charging Energy:

"Direct Charging Energy" shall mean the energy that an Energy Storage Resource purchases from the PJM Interchange Energy Market and (i) later resells to the PJM Interchange Energy Market; or (ii) is lost to conversion inefficiencies, provided that such inefficiencies are an unavoidable component of the conversion, storage, and discharge process that is used to resell energy back to the PJM Interchange Energy Market.

Direct Load Control:

"Direct Load Control" shall mean load reduction that is controlled directly by the Curtailment Service Provider's market operations center or its agent, in response to PJM instructions.

Dispatch Rate:

"Dispatch Rate" shall mean the control signal, expressed in dollars per megawatt-hour, calculated and transmitted continuously and dynamically to direct the output level of all generation resources dispatched by the Office of the Interconnection in accordance with the Offer Data.

Dispatched Charging Energy:

"Dispatched Charging Energy" shall mean Direct Charging Energy that an Energy Storage Resource Model Participant receives from the electric grid pursuant to PJM dispatch while providing a service in the PJM markets.

Dynamic Schedule:

"Dynamic Schedule" shall have the same meaning provided in the Operating Agreement.

Dynamic Transfer:

"Dynamic Transfer" shall have the same meaning provided in the Operating Agreement.

Definitions – E - F

Economic-based Enhancement or Expansion:

"Economic-based Enhancement or Expansion" shall have the same meaning provided in the Operating Agreement.

Economic Load Response Participant:

"Economic Load Response Participant" shall mean a Member or Special Member that qualifies under Operating Agreement, Schedule 1, section 1.5A, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.5A, to participate in the PJM Interchange Energy Market and/or Ancillary Services markets through reductions in demand.

Economic Maximum:

"Economic Maximum" shall mean the highest incremental MW output level, submitted to PJM market systems by a Market Participant, that a unit can achieve while following economic dispatch.

Economic Minimum:

"Economic Minimum" shall mean the lowest incremental MW output level, submitted to PJM market systems by a Market Participant, that a unit can achieve while following economic dispatch.

Effective FTR Holder:

"Effective FTR Holder" shall mean:

(i) For an FTR Holder that is either a (a) privately held company, or (b) a municipality or electric cooperative, as defined in the Federal Power Act, such FTR Holder, together with any Affiliate, subsidiary or parent of the FTR Holder, any other entity that is under common ownership, wholly or partly, directly or indirectly, or has the ability to influence, directly or indirectly, the management or policies of the FTR Holder; or

(ii) For an FTR Holder that is a publicly traded company including a wholly owned subsidiary of a publicly traded company, such FTR Holder, together with any Affiliate, subsidiary or parent of the FTR Holder, any other PJM Member has over 10% common ownership with the FTR Holder, wholly or partly, directly or indirectly, or has the ability to influence, directly or indirectly, the management or policies of the FTR Holder; or

(iii) an FTR Holder together with any other PJM Member, including also any Affiliate, subsidiary or parent of such other PJM Member, with which it shares common ownership, wholly or partly, directly or indirectly, in any third entity which is a PJM Member (e.g., a joint venture).

EFORd:

"EFORd" shall have the meaning specified in the PJM Reliability Assurance Agreement.

Electrical Distance:

"Electrical Distance" shall mean, for a Generation Capacity Resource geographically located outside the metered boundaries of the PJM Region, the measure of distance, based on impedance and in accordance with the PJM Manuals, from the Generation Capacity Resource to the PJM Region.

Eligible Customer:

"Eligible Customer" shall mean:

(i) Any electric utility (including any Transmission Owner and any power marketer), Federal power marketing agency, or any person generating electric energy for sale for resale is an Eligible Customer under the Tariff. Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico. However, with respect to transmission service that the Commission is prohibited from ordering by Section 212(h) of the Federal Power Act, such entity is eligible only if the service is provided pursuant to a state requirement that the Transmission Provider or Transmission Owner offer the unbundled transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner.

(ii) Any retail customer taking unbundled transmission service pursuant to a state requirement that the Transmission Provider or a Transmission Owner offer the transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner, is an Eligible Customer under the Tariff. As used in Tariff, Part VI, Eligible Customer shall mean only those Eligible Customers that have submitted a Completed Application.

Emergency Action:

"Emergency Action" shall mean any emergency action for locational or system-wide capacity shortages that either utilizes pre-emergency mandatory load management reductions or other emergency capacity, or initiates a more severe action including, but not limited to, a Voltage Reduction Warning, Voltage Reduction Action, Manual Load Dump Warning, or Manual Load Dump Action.

Emergency Condition:

"Emergency Condition" shall mean a condition or situation (i) that in the judgment of any Interconnection Party is imminently likely to endanger life or property; or (ii) that in the judgment of the Interconnected Transmission Owner or Transmission Provider is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Transmission System, the Interconnection Facilities, or the

transmission systems or distribution systems to which the Transmission System is directly or indirectly connected; or (iii) that in the judgment of Interconnection Customer is imminently likely (as determined in a non-discriminatory manner) to cause damage to the Customer Facility or to the Customer Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions, provided that a Generation Interconnection Customer is not obligated by an Interconnection Service Agreement to possess black start capability. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not constitute an Emergency Condition, unless one or more of the enumerated conditions or situations identified in this definition also exists.

Emergency Load Response Program:

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

Energy Efficiency Resource:
"Energy Efficiency Resource" shall have the meaning specified in the PJM Reliability Assurance Agreement.

Energy Market Opportunity Cost:

"Energy Market 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 available run hours due to limitations imposed on the unit by Applicable Laws and Regulations, and (b) the forecasted future Locational Marginal Price at which the generating unit could run while not violating such limitations. Energy Market 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 compliance period, which compliance period is determined by the applicable regulatory authority and is reflected in the rules set forth in PJM Manual 15. Energy Market Opportunity Costs shall be limited to those resources which are specifically delineated in Operating Agreement, Schedule 2.

Energy Resource:

"Energy Resource" shall mean a ~~generating facility~~Generating Facility that is not a Capacity Resource.

Energy Settlement Area:

"Energy Settlement Area" shall mean the bus or distribution of busses that represents the physical location of Network Load and by which the obligations of the Network Customer to PJM are settled.

Energy Storage Resource:

"Energy Storage Resource" shall mean a resource capable of receiving electric energy from the grid and storing it for later injection to the grid that participates in the PJM Energy, Capacity and/or Ancillary Services markets as a Market Participant.

Energy Storage Resource Model Participant:

"Energy Storage Resource Model Participant" shall mean an Energy Storage Resource utilizing the Energy Storage Resource Participation Model.

Energy Storage Resource Participation Model:

"Energy Storage Resource Participation Model" shall mean the participation model accepted by the Commission in Docket No. ER19-XXX-000.

Energy Transmission Injection Rights:

"Energy Transmission Injection Rights" shall mean the rights to schedule energy deliveries at a specified point on the Transmission System. Energy Transmission Injection Rights may be awarded only to a Merchant D.C. Transmission Facility that connects the Transmission System to another control area. Deliveries scheduled using Energy Transmission Injection Rights have rights similar to those under Non-Firm Point-to-Point Transmission Service.

Environmental Laws:

"Environmental Laws" shall mean applicable Laws or Regulations relating to pollution or protection of the environment, natural resources or human health and safety.

Environmentally-Limited Resource:

"Environmentally-Limited Resource" shall mean a resource which has a limit on its run hours imposed by a federal, state, or other governmental agency that will significantly limit its availability, on either a temporary or long-term basis. This includes a resource that is limited by a governmental authority to operating only during declared PJM capacity emergencies.

Equivalent Load:

"Equivalent Load" shall mean the sum of a Market Participant's net system requirements to serve its customer load in the PJM Region, if any, plus its net bilateral transactions.

Existing Generation Capacity Resource:

"Existing Generation Capacity Resource" shall have the meaning specified in the Reliability Assurance Agreement.

Export Credit Exposure:

"Export Credit Exposure" is determined for each Market Participant for a given Operating Day, and shall mean the sum of credit exposures for the Market Participant's Export Transactions for that Operating Day and for the preceding Operating Day.

Export Nodal Reference Price:

"Export Nodal Reference Price" at each location is the 97th percentile, shall be, the real-time hourly integrated price experienced over the corresponding two-month period in the preceding calendar year, calculated separately for peak and off-peak time periods. The two-month time periods used in this calculation shall be January and February, March and April, May and June, July and August, September and October, and November and December.

Export Transaction:

"Export Transaction" shall be a transaction by a Market Participant that results in the transfer of energy from within the PJM Control Area to outside the PJM Control Area. Coordinated External Transactions that result in the transfer of energy from the PJM Control Area to an adjacent Control Area are one form of Export Transaction.

Export Transaction Price Factor:

"Export Transaction Price Factor" for a prospective time interval shall be the greater of (i) PJM's forecast price for the time interval, if available, or (ii) the Export Nodal Reference Price, but shall not exceed the Export Transaction's dispatch ceiling price cap, if any, for that time interval. The Export Transaction Price Factor for a past time interval shall be calculated in the same manner as for a prospective time interval, except that the Export Transaction Price Factor may use a tentative or final settlement price, as available. If an Export Nodal Reference Price is not available for a particular time interval, PJM may use an Export Transaction Price Factor for that time interval based on an appropriate alternate reference price.

Export Transaction Screening:

"Export Transaction Screening" shall be the process PJM uses to review the Export Credit Exposure of Export Transactions against the Credit Available for Export Transactions, and deny or curtail all or a portion of an Export Transaction, if the credit required for such transactions is greater than the credit available for the transactions.

Export Transactions Net Activity:

"Export Transactions Net Activity" shall mean the aggregate net total, resulting from Export Transactions, of (i) Spot Market Energy charges, (ii) Transmission Congestion Charges, and (iii) Transmission Loss Charges, calculated as set forth in Operating Agreement, Schedule 1 and the parallel provisions of Tariff, Attachment K-Appendix. Export Transactions Net Activity may be positive or negative.

Extended Summer Demand Resource:

"Extended Summer Demand Resource" shall have the meaning specified in the Reliability Assurance Agreement.

Extended Summer Resource Price Adder:

"Extended Summer Resource Price Adder" shall mean, for Delivery Years through May 31, 2018, an addition to the marginal value of Unforced Capacity as necessary to reflect the price of Annual Resources and Extended Summer Demand Resources required to meet the applicable Minimum Extended Summer Resource Requirement.

External Market Buyer:

"External Market Buyer" shall mean a Market Buyer making purchases of energy from the PJM Interchange Energy Market for consumption by end-users outside the PJM Region, or for load in the PJM Region that is not served by Network Transmission Service.

External Resource:

"External Resource" shall mean a generation resource located outside the metered boundaries of the PJM Region.

Facilities Study:

"Facilities Study" shall be an engineering study conducted by the Transmission Provider (in coordination with the affected Transmission Owner(s)) to: (1) determine the required modifications to the Transmission Provider's Transmission System necessary to implement the conclusions of the System Impact Study; and (2) complete any additional studies or analyses documented in the System Impact Study or required by PJM Manuals, and determine the required modifications to the Transmission Provider's Transmission System based on the conclusions of such additional studies. The Facilities Study shall include the cost and scheduled completion date for such modifications, that will be required to provide the requested transmission service or to accommodate a New Service Request. As used in the Interconnection Service Agreement or Construction Service Agreement, Facilities Study shall mean that certain Facilities Study conducted by Transmission Provider (or at its direction) to determine the design and specification of the Customer Funded Upgrades necessary to accommodate the New Service Customer's New Service Request in accordance with Tariff, Part VI, section 207.

Federal Power Act:

"Federal Power Act" shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a, et seq.

FERC or Commission:

"FERC" or "Commission" shall mean the Federal Energy Regulatory Commission or any successor federal agency, commission or department exercising jurisdiction over the Tariff, Operating Agreement and Reliability Assurance Agreement.

FERC Market Rules:

"FERC Market Rules" mean the market behavior rules and the prohibition against electric energy market manipulation codified by the Commission in its Rules and Regulations at 18 CFR §§ 1c.2 and 35.37, respectively; the Commission-approved PJM Market Rules and any related proscriptions or any successor rules that the Commission from time to time may issue, approve or otherwise establish.

Final Offer:

"Final Offer" shall mean the offer on which a resource was dispatched by the Office of the Interconnection for a particular clock hour for the Operating Day.

Final RTO Unforced Capacity Obligation:

"Final RTO Unforced Capacity Obligation" shall mean the capacity obligation for the PJM Region, determined in accordance with RAA, Schedule 8.

Financial Close:

"Financial Close" shall mean the Capacity Market Seller has demonstrated that the Capacity Market Seller or its agent has completed the act of executing the material contracts and/or other documents necessary to (1) authorize construction of the project and (2) establish the necessary funding for the project under the control of an independent third-party entity. A sworn, notarized certification of an independent engineer certifying to such facts, and that the engineer has personal knowledge of, or has engaged in a diligent inquiry to determine, such facts, shall be sufficient to make such demonstration. For resources that do not have external financing, Financial Close shall mean the project has full funding available, and that the project has been duly authorized to proceed with full construction of the material portions of the project by the appropriate governing body of the company funding such project. A sworn, notarized certification by an officer of such company certifying to such facts, and that the officer has personal knowledge of, or has engaged in a diligent inquiry to determine, such facts, shall be sufficient to make such demonstration.

Financial Transmission Right:

"Financial Transmission Right" or "FTR" shall mean a right to receive Transmission Congestion Credits as specified in Operating Agreement, Schedule 1, section 5.2.2 and the parallel provisions of Tariff, Attachment K-Appendix, section 5.2.2.

Financial Transmission Right Obligation:

"Financial Transmission Right Obligation" shall mean a right to receive Transmission Congestion Credits as specified in Operating Agreement, Schedule 1, section 5.2.2(b), and the parallel provisions of Tariff, Attachment K-Appendix, section 5.2.2(b).

Financial Transmission Right Option:

"Financial Transmission Right Option" shall mean a right to receive Transmission Congestion Credits as specified in Operating Agreement, Schedule 1, section 5.2.2(c), and the parallel provisions of Tariff, Attachment K-Appendix, section 5.2.2(c).

Firm Point-To-Point Transmission Service:

"Firm Point-To-Point Transmission Service" shall mean Transmission Service under the Tariff that is reserved and/or scheduled between specified Points of Receipt and Delivery pursuant to Tariff, Part II.

Firm Transmission Feasibility Study:

"Firm Transmission Feasibility Study" shall mean a study conducted by the Transmission Provider in accordance with Tariff, Part II, section 19.3 and Tariff, Part III, section 32.3.

Firm Transmission Withdrawal Rights:

"Firm Transmission Withdrawal Rights" shall mean the rights to schedule energy and capacity withdrawals from a Point of Interconnection of a Merchant Transmission Facility with the Transmission System. Firm Transmission Withdrawal Rights may be awarded only to a Merchant D.C. Transmission Facility that connects the Transmission System with another control area. Withdrawals scheduled using Firm Transmission Withdrawal Rights have rights similar to those under Firm Point-to-Point Transmission Service.

First Incremental Auction:

"First Incremental Auction" shall mean an Incremental Auction conducted 20 months prior to the start of the Delivery Year to which it relates.

Flexible Resource:

"Flexible Resource" shall mean a generating resource that must have a combined Start-up Time and Notification Time of less than or equal to two hours; and a Minimum Run Time of less than or equal to two hours.

Forecast Pool Requirement:

"Forecast Pool Requirement" shall have the meaning specified in the Reliability Assurance Agreement.

Foreign Guaranty:

"Foreign Guaranty" shall mean a Corporate Guaranty provided by an Affiliate of a Participant that is domiciled in a foreign country, and meets all of the provisions of Tariff, Attachment Q.

Form 715 Planning Criteria:

"Form 715 Planning Criteria" shall have the same meaning provided in the Operating Agreement.

FTR Credit Limit:

"FTR Credit Limit" shall mean the amount of credit established with PJMSettlement that an FTR Participant has specifically designated to be used for FTR activity in a specific customer account. Any such credit so set aside shall not be considered available to satisfy any other credit requirement the FTR Participant may have with PJMSettlement.

FTR Credit Requirement:

"FTR Credit Requirement" shall mean the amount of credit that a Participant must provide in order to support the FTR positions that it holds and/or for which it is bidding. The FTR Credit Requirement shall not include months for which the invoicing has already been completed, provided that PJMSettlement shall have up to two Business Days following the date of the invoice completion to make such adjustments in its credit systems. FTR Credit Requirements are calculated and applied separately for each separate customer account.

FTR Flow Undiversified:

"FTR Flow Undiversified" shall have the meaning established in Tariff, Attachment Q, section V.G.

FTR Historical Value:

For each FTR for each month, "FTR Historical Value" shall mean the weighted average of historical values over three years for the FTR path using the following weightings: 50% - most recent year; 30% - second year; 20% - third year.

FTR Holder:

"FTR Holder" shall mean the PJM Member that has acquired and possesses an FTR.

FTR Monthly Credit Requirement Contribution:

For each FTR, for each month, "FTR Monthly Credit Requirement Contribution" shall mean the total FTR cost for the month, prorated on a daily basis, less the FTR Historical Value for the

month. For cleared FTRs, this contribution may be negative; prior to clearing, FTRs with negative contribution shall be deemed to have zero contribution.

FTR Net Activity:

"FTR Net Activity" shall mean the aggregate net value of the billing line items for auction revenue rights credits, FTR auction charges, FTR auction credits, and FTR congestion credits, and shall also include day-ahead and balancing/real-time congestion charges up to a maximum net value of the sum of the foregoing auction revenue rights credits, FTR auction charges, FTR auction credits and FTR congestion credits.

FTR Participant:

"FTR Participant" shall mean any Market Participant that provides or is required to provide Collateral in order to participate in PJM's FTR auctions.

FTR Portfolio Auction Value:

"FTR Portfolio Auction Value" shall mean for each customer account of a Market Participant, the sum, calculated on a monthly basis, across all FTRs, of the FTR price times the FTR volume in MW.

Fuel Cost Policy:

"Fuel Cost Policy" shall mean the document provided by a Market Seller to PJM and the Market Monitoring Unit in accordance with PJM Manual 15 and Operating Agreement, Schedule 2, which documents the Market Seller's method used to price fuel for calculation of the Market Seller's cost-based offers for a generation resource.

Full Notice to Proceed:

"Full Notice to Proceed" shall mean that all material third party contractors have been given the notice to proceed with construction by the Capacity Market Seller or its agent, with a guaranteed completion date backed by liquidated damages.

Definitions – G - H

Generating Facilities:

"Generating Facilities" shall mean Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

Generating Market Buyer:

"Generating Market Buyer" shall mean an Internal Market Buyer that is a Load Serving Entity that owns or has contractual rights to the output of generation resources capable of serving the Market Buyer's load in the PJM Region, or of selling energy or related services in the PJM Interchange Energy Market or elsewhere.

Generation Capacity Resource:

"Generation Capacity Resource" shall have the meaning specified in the Reliability Assurance Agreement.

Generation Interconnection Customer:

"Generation Interconnection Customer" shall mean an entity that submits an Interconnection Request to interconnect a new generation facility or to increase the capacity of an existing generation facility interconnected with the Transmission System in the PJM Region.

Generation Interconnection Facilities Study:

"Generation Interconnection Facilities Study" shall mean a Facilities Study related to a Generation Interconnection Request.

Generation Interconnection Feasibility Study:

"Generation Interconnection Feasibility Study" shall mean a study conducted by the Transmission Provider (in coordination with the affected Transmission Owner(s)) in accordance with Tariff, Part IV, section 36.2.

Generation Interconnection Request:

"Generation Interconnection Request" shall mean a request by a Generation Interconnection Customer pursuant to Tariff, Part IV, subpart A, to interconnect a generating unit with the Transmission System or to increase the capacity of a generating unit interconnected with the Transmission System in the PJM Region.

Generation Owner:

"Generation Owner" shall mean a Member that owns, leases with rights equivalent to ownership, or otherwise controls and operates one or more operating generation resources located in the PJM Region. The foregoing notwithstanding, for a planned generation resource to qualify a Member as a Generation Owner, such resource shall have cleared an RPM auction, and for Energy Resources, the resource shall have a FERC-jurisdictional interconnection agreement or wholesale market participation agreement within PJM. Purchasing all or a portion of the output of a generation resource shall not be sufficient to qualify a Member as a Generation Owner. For purposes of Members Committee sector classification, a Member that is primarily a retail end-user of electricity that owns generation may qualify as a Generation Owner if: (1) the generation resource is the subject of a FERC-jurisdictional interconnection agreement or wholesale market participation agreement within PJM; (2) the average physical unforced capacity owned by the Member and its affiliates over the five Planning Periods immediately preceding the relevant Planning Period exceeds the average PJM capacity obligation of the Member and its affiliates over the same time period; and (3) the average energy produced by the Member and its affiliates within PJM over the five Planning Periods immediately preceding the relevant Planning Period exceeds the average energy consumed by the Member and its affiliates within PJM over the same time period.

Generation Resource Maximum Output:

"Generation Resource Maximum Output" shall mean, for Customer Facilities identified in an Interconnection Service Agreement or Wholesale Market Participation Agreement, the Generation Resource Maximum Output for a generating unit shall equal the unit's pro rata share of the Maximum Facility Output, determined by the Economic Maximum values for the available units at the Customer Facility. For generating units not identified in an Interconnection Service Agreement or Wholesale Market Participation Agreement, the Generation Resource Maximum Output shall equal the generating unit's Economic Maximum.

Generator Forced Outage:

"Generator Forced Outage" shall mean an immediate reduction in output or capacity or removal from service, in whole or in part, of a generating unit by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the facility, as specified in the relevant portions of the PJM Manuals. A reduction in output or removal from service of a generating unit in response to changes in market conditions shall not constitute a Generator Forced Outage.

Generator Maintenance Outage:

"Generator Maintenance Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit in order to perform necessary repairs on specific components of the facility, if removal of the facility meets the guidelines specified in the PJM Manuals.

Generator Planned Outage:

"Generator Planned Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit for inspection, maintenance or repair with the approval of the Office of the Interconnection in accordance with the PJM Manuals.

Good Utility Practice:

"Good Utility Practice" shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather is intended to include acceptable practices, methods, or acts generally accepted in the region; including those practices required by Federal Power Act Section 215(a)(4).

Governmental Authority:

"Governmental Authority" shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, arbitrating body, or other governmental authority having jurisdiction over any Interconnection Party or Construction Party or regarding any matter relating to an Interconnection Service Agreement or Construction Service Agreement, as applicable.

Hazardous Substances:

"Hazardous Substance" shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

Hot Weather Alert:

"Hot Weather Alert" shall mean the notice provided by PJM to PJM Members, Transmission Owners, resource owners and operators, customers, and regulators to prepare personnel and facilities for extreme hot and/or humid weather conditions which may cause capacity requirements and/or unit unavailability to be substantially higher than forecast are expected to persist for an extended period.

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 Charging Energy:

"Load Serving Charging Energy" shall mean energy that is purchased from the PJM Interchange Energy Market and stored in an Energy Storage Resource for later resale to end-use load.

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 *reduction in megawatts due to* Regulation*,* Synchronized Reserve*, or Secondary 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, section 2.

M2M Flowgate:

"M2M Flowgate" shall have the meaning provided in the Joint Operating Agreement between the Midcontinent Independent Transmission System Operator, Inc. and PJM Interconnection, L.L.C.

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.

Marginal Value:

"Marginal Value" shall mean the incremental change in system dispatch costs, measured as a $/MW value incurred by providing one additional MW of relief to the transmission constraint.

Mark-to-Auction Value:

"Mark-to-Auction Value" shall mean the net increase (or decrease) in value of a portfolio of FTRs, as further described in Tariff, Attachment Q, section IV.C.9.

Market Monitor:

"Market Monitor**"** means the head of the Market Monitoring Unit.

Market Monitoring Unit or MMU:

"Market Monitoring Unit" or "MMU" means the independent Market Monitoring Unit defined in 18 CFR § 35.28(a)(7) and established under the PJM Market Monitoring Plan (Attachment M) to the PJM Tariff that is responsible for implementing the Market Monitoring Plan, including the Market Monitor. The Market Monitoring Unit may also be referred to as the IMM or Independent Market Monitor for PJM

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 Tariff, Attachment M, 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 Revenue Neutrality Offset:

"Market Revenue Neutrality Offset" shall mean the revenue in excess of the cost for a resource from the energy, Synchronized Reserve, Non-Synchronized Reserve, and Secondary Reserve markets realized from an increase in real-time market megawatt assignment from a day-ahead market megawatt assignment in any of these markets due to the decrease in the real-time reserve market megawatt assignment from a day-ahead reserve market megawatt assignment in any of the reserve markets.

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 in Tariff, Attachment T, 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 Tariff, Part

IV, section 36, 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 30-minute Reserve Requirement:

"Minimum 30-minute Reserve Requirement" shall mean the megawatts required to be maintained in a Reserve Zone or Reserve Sub-zone as 30-minute Reserve inclusive of any increase to account for additional reserves scheduled to address operational uncertainty. The Minimum 30-minute Reserve Requirement is calculated in accordance with the PJM Manuals and establishes the first segment on the Operating Reserve Demand Curve for 30-minute Reserve.

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 Primary Reserve Requirement:

"Minimum Primary Reserve Requirement" shall mean the megawatts required to be maintained in a Reserve Zone or Reserve Sub-zone as Primary Reserve, inclusive of any increase to account for additional reserves scheduled to address operational uncertainty. The Minimum Primary Reserve Requirement is calculated in accordance with the PJM Manuals, and establishes the first segment on the Operating Reserve Demand Curve for Primary Reserve.

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.

Minimum Synchronized Reserve Requirement:

"Minimum Synchronized Reserve Requirement" shall mean the megawatts required to be maintained in a Reserve Zone or Reserve Sub-zone as Synchronized Reserve, inclusive of any increase to account for additional reserves scheduled to address operational uncertainty. The Minimum Synchronized Reserve Requirement is calculated in accordance with the PJM Manuals, and establishes the first segment on the Operating Reserve Demand Curve for Synchronized Reserve.

MISO:

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

MTA Collateral Call:

"MTA Collateral Call" shall mean a demand for additional Collateral issued due to a credit shortfall arising from a Mark-to-Auction Value change. The requirements and remedies for an MTA Collateral Call may be different from the requirements and remedies for a Collateral Call.

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 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 Reliability Assurance Agreement, Article I.

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*, Non-Dispatched Charging Energy, and Load Serving Charging Energy*) 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 Load shall not include Dispatched Charging Energy.*

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 are not part of an Affected System; 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~~ Both Transmission Provider and Interconnection Customer must agree as to what constitutes Direct Connection Network Upgrades and identify them in the Interconnection Construction Service Agreement, Schedule D. If the Transmission Provider and Interconnection Customer disagree about whether a particular Network Upgrade is a Direct Connection Network Upgrade, the Transmission Provider must provide the Interconnection Customer a written technical explanation outlining why the Transmission Provider does not consider the Network Upgrade to be a Direcct Connection Network Upgrade within 15 days of its determination.

(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-Dispatched Charging Energy:

"Non-Dispatched Charging Energy" shall mean all Direct Charging Energy that an Energy Storage Resource Model Participant receives from the electric grid that is not otherwise Dispatched Charging Energy.

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 Tariff, Attachment DD, section 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 Operating Agreement, Schedule 2.

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, section 1.5A.6.

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 PJMSettlement 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 PJMSettlement 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) or PJM Open Access Same-Time Information System:

"Open Access Same-Time Information System," "PJM Open Access Same-Time Information System" or "OASIS" shall mean the electronic communication and 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 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.

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

"Operating Agreement of the PJM Interconnection, L.L.C.," "Operating Agreement" or "PJM Operating Agreement" shall mean the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. 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., on file with the Commission.

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.

Operating Reserve Demand Curve:

"Operating Reserve Demand Curve" shall mean a curve with prices on the y-axis and megawatts on the x-axis, which defines the relationship between each incremental megawatt of reserves that can be used to meet a given reserve requirement and the value placed on maintaining that megawatt level of reserve, expressed in $/MWh.

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 Tariff, Attachment N-3.

Part I:

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

Part II:

"Part II" shall mean 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 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 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 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 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)*, plus 10% of such costs,* 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*, plus 10% of such costs,* 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.

Permissible Technological Advancement:

"Permissible Technological Advancement" shall mean a proposed technological change to turbines, inverters, or plant supervisory controls or other similar advancements to the technology proposed in the Interconnection Request that is submitted to the Transmission Provider with an executed System Impact Study Agreement provided such change does not (i) increase the capability of the Generating Facility as specified in the original Interconnection Request; or (ii) represent a different fuel type from the original Interconnection Request. Any proposed technological change submitted after an executed System Impact Study Agreement is submitted to the Transmission Provider shall be considered a Permissible Technological Advancement if it is not deemed to be a Material Modification pursuant to Tariff, Part IV, Subpart A, section 36.2A.3.

PJM:

"PJM" shall mean PJM Interconnection, L.L.C., including the Office of the Interconnection as referenced in the PJM Operating Agreement. When such term is being used in the RAA it shall also include the PJM Board.

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, acting pursuant to the Operating Agreement except when such term is being used in Tariff, Attachment M, 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 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 Operating Agreement and 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 inteval 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 Office of the Interconnection for the purchase and sale of spot electric energy at wholesale in interstate commerce and related servicesestablished pursuant to 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 Operating Agreement and 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 inteval 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 Operating Agreement and 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 PJMSettlement.

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, section 5.2.6).

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 mean the percent installed reserve margin for the PJM Region required pursuant to RAA, Schedule 4.1, as approved by the PJM Board.

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.

PJMSettlement:

"PJM Settlement" or "PJM Settlement, Inc." shall mean PJM Settlement, Inc. (or its successor), established by PJM as set forth in Operaitng Agreement, section 3.3.

PJM Tariff, Tariff, O.A.T.T., OATT or PJM Open Access Transmission Tariff:

"PJM Tariff," "Tariff," "O.A.T.T.," "OATT," or "PJM Open Access Transmission 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.

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 mean the 12 moths beginning June 1 and extending through May 31 of the following year, or such other period approved by the Members Committee.

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 Operating Agreement, Schedule 1, section 8 and the parallel provisions of Tariff, Attachment K-Appendix, section 8.

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 *Economic Load Response Participant r*esources 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 *demand for Primary Reserves* in a Reserve Zone or Reserve Sub-zone*,* as *defined by the Operating Reserve Demand Curve for* Primary Reserve*. The requirement can be satisfied by any combination of Synchronized Reserve or Non-Synchronized Reserve resources*.

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 RAA, Article I 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.

Provisional Interconnection Service:

"Provisional Interconnection Service" shall mean interconnection service provided by Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to Transmission Provider's Transmission System and enabling that Transmission System to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Interconnection Service Agreement and, if applicable, the Tariff.

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.

Ramping Capability:

"Ramping Capability" shall mean the sustained rate of change of generator output, in megawatts per minute.

Real-time Congestion Price:

"Real-time Congestion Price" shall mean the Congestion Price resulting from the Office of the Interconnection's dispatch of the PJM Interchange Energy Market in the Operating Day.

Real-time Loss Price:

"Real-time Loss Price" shall mean the Loss Price resulting from the Office of the Interconnection's dispatch of the PJM Interchange Energy Market in the Operating Day.

Real-time Energy Market:

"Real-time Energy Market" shall mean the purchase or sale of energy and payment of Transmission Congestion Charges for quantity deviations from the Day-ahead Energy Market in the Operating Day.

Real-time Offer:

"Real-time Offer" shall mean a new offer or an update to a Market Seller's existing cost-based or market-based offer for a clock hour, submitted for use after the close of the Day-ahead Energy Market.

Real-time Prices:

"Real-time Prices" shall mean the Locational Marginal Prices resulting from the Office of the Interconnection's dispatch of the PJM Interchange Energy Market in the Operating Day.

Real-time Settlement Interval:

"Real-time Settlement Interval" shall mean the interval used by settlements, which shall be every five minutes.

Real-time System Energy Price:

"Real-time System Energy Price" shall mean the System Energy Price resulting from the Office of the Interconnection's dispatch of the PJM Interchange Energy Market in the Operating Day.

Reasonable Efforts:

"Reasonable Efforts" shall mean, with respect to any action required to be made, attempted, or taken by an Interconnection Party or by a Construction Party under Tariff, Part IV or Part VI, an Interconnection Service Agreement, or a Construction Service Agreement, such efforts as are timely and consistent with Good Utility Practice and with efforts that such party would undertake for the protection of its own interests.

Receiving Party:

"Receiving Party" shall mean the entity receiving the capacity and energy transmitted by the Transmission Provider to Point(s) of Delivery.

Referral:

"Referral" shall mean a formal report of the Market Monitoring Unit to the Commission for investigation of behavior of a Market Participant, of behavior of PJM, or of a market design flaw, pursuant to Tariff, Attachment M, section IV.I.

Reference Resource:

"Reference Resource" shall mean a combustion turbine generating station, configured with a *single* General Electric Frame *7HA* turbine with *evaporative cooling*, Selective Catalytic Reduction technology all CONE Areas, dual fuel capability, and a heat rate of 9.*134* Mmbtu/ MWh.

Regional Entity:

"Regional Entity" shall have the same meaning specified in the Operating Agreement.

Regional Transmission Expansion Plan:

"Regional Transmission Expansion Plan" shall mean the plan prepared by the Office of the Interconnection pursuant to Operating Agreement, Schedule 6 for the enhancement and expansion of the Transmission System in order to meet the demands for firm transmission service in the PJM Region.

Regional Transmission Group (RTG):

"Regional Transmission Group" or "RTG" shall mean a voluntary organization of transmission owners, transmission users and other entities approved by the Commission to efficiently coordinate transmission planning (and expansion), operation and use on a regional (and interregional) basis.

Regulation:

"Regulation" shall mean the capability of a specific generation resource or Demand Resource with appropriate telecommunications, control and response capability to separately increase and

decrease its output or adjust load in response to a regulating control signal, in accordance with the specifications in the PJM Manuals.

Regulation Zone:

"Regulation Zone" shall mean any of those one or more geographic areas, each consisting of a combination of one or more Control Zone(s) as designated by the Office of the Interconnection in the PJM Manuals, relevant to provision of, and requirements for, regulation service.

Relevant Electric Retail Regulatory Authority:

"Relevant Electric Retail Regulatory Authority" shall mean an entity that has jurisdiction over and establishes prices and policies for competition for providers of retail electric service to end-customers, such as the city council for a municipal utility, the governing board of a cooperative utility, the state public utility commission or any other such entity.

Reliability Assurance Agreement or PJM Reliability Assurance Agreement:

"Reliability Assurance Agreement" or " PJM Reliability Assurance Agreement" shall mean that certain Reliability Assurance Agreement Among Load Serving Entities in the PJM Region, on file with FERC as PJM Interconnection L.L.C. Rate Schedule FERC No. 44, and as amended from time to time thereafter.

Reliability Pricing Model Auction:

"Reliability Pricing Model Auction" or "RPM Auction" shall mean the Base Residual Auction or any Incremental Auction, or, for the 2016/2017 and 2017/2018 Delivery Years, any Capacity Performance Transition Incremental Auction.

Required Transmission Enhancements:

"Regional Transmission Enhancements" shall mean enhancements and expansions of the Transmission System that (1) a Regional Transmission Expansion Plan developed pursuant to Operating Agreement, Schedule 6 or (2) any joint planning or coordination agreement between PJM and another region or transmission planning authority set forth in Tariff, Schedule 12-Appendix B ("Appendix B Agreement") designates one or more of the Transmission Owner(s) to construct and own or finance. Required Transmission Enhancements shall also include enhancements and expansions of facilities in another region or planning authority that meet the definition of transmission facilities pursuant to FERC's Uniform System of Accounts or have been classified as transmission facilities in a ruling by FERC addressing such facilities constructed pursuant to an Appendix B Agreement cost responsibility for which has been assigned at least in part to PJM pursuant to such Appendix B Agreement.

Reserved Capacity:

"Reserved Capacity" shall mean the maximum amount of capacity and energy that the Transmission Provider agrees to transmit for the Transmission Customer over the Transmission Provider's Transmission System between the Point(s) of Receipt and the Point(s) of Delivery under Tariff, Part II. Reserved Capacity shall be expressed in terms of whole megawatts on a sixty (60) minute interval (commencing on the clock hour) basis.

Reserve Penalty Factor:

"Reserve Penalty Factor" shall mean the *maximum production* cost, in $/MWh, *willing to be incurred to meet the Minimum Primary Reserve Requirement, Minimum Synchronized Reserve Requirement, or Minimum 30-minute Reserve Requirement for* a *given* Reserve Zone or Reserve Sub-zone*, as specified by the applicable Operating Reserve Demand Curve.*

Reserve Sub-zone:

"Reserve Sub-zone" shall mean any of those geographic areas wholly contained within a Reserve Zone, consisting of a combination of a portion of one or more Control Zone(s) as designated by the Office of the Interconnection in the PJM Manuals, relevant to provision of, and requirements for, reserve service.

Reserve Zone:

"Reserve Zone" shall mean any of those geographic areas consisting of a combination of one or more Control Zone(s), as designated by the Office of the Interconnection in the PJM Manuals, relevant to provision of, and requirements for, reserve service.

Residual Auction Revenue Rights:

"Residual Auction Revenue Rights" shall mean incremental stage 1 Auction Revenue Rights created within a Planning Period by an increase in transmission system capability, including the return to service of existing transmission capability, that was not modeled pursuant to Operating Agreement, Schedule 1, section 7.5 and the parallel provisions of Tariff, Attachment K-Appendix, section 7.5 in compliance with Operating Agreement, Schedule 1, section 7.4.2 (h) and the parallel provisions of Tariff, Attachment K-Appendix, section 7.4.2(h), and, if modeled, would have increased the amount of stage 1 Auction Revenue Rights allocated pursuant to Operating Agreement, Schedule 1, section 7.4.2 and the parallel provisions of Tariff, Attachment K-Appendix, section 7.4.2; provided that, the foregoing notwithstanding, Residual Auction Revenue Rights shall exclude: 1) Incremental Auction Revenue Rights allocated pursuant to Tariff, Part VI; and 2) Auction Revenue Rights allocated to entities that are assigned cost responsibility pursuant to Operating Agreement, Schedule 6 for transmission upgrades that create such rights.

Residual Metered Load:

"Residual Metered Load" shall mean all load remaining in an electric distribution company's fully metered franchise area(s) or service territory(ies) after all nodally priced load of entities serving load in such area(s) or territory(ies) has been carved out.

Resource Substitution Charge:

"Resource Substitution Charge" shall mean a charge assessed on Capacity Market Buyers in an Incremental Auction to recover the cost of replacement Capacity Resources.

Revenue Data for Settlements:

"Revenue Data for Settlements" shall mean energy quantities used in accounting and billing as determined pursuant to Tariff, Attachment K-Appendix and the corresponding provisions of Operating Agreement, Schedule 1.

RPM Seller Credit:

"RPM Seller Credit" shall mean an additional form of Unsecured Credit defined in Tariff, Attachment Q, section IV.

Scheduled Incremental Auctions:

"Scheduled Incremental Auctions" shall refer to the First, Second, or Third Incremental Auction.

Schedule of Work:

"Schedule of Work" shall mean that schedule attached to the Interconnection Construction Service Agreement setting forth the timing of work to be performed by the Constructing Entity pursuant to the Interconnection Construction Service Agreement, based upon the Facilities Study and subject to modification, as required, in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals.

Scope of Work:

"Scope of Work" shall mean that scope of the work attached as a schedule to the Interconnection Construction Service Agreement and to be performed by the Constructing Entity(ies) pursuant to the Interconnection Construction Service Agreement, provided that such Scope of Work may be modified, as required, in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals.

Seasonal Capacity Performance Resource:

"Seasonal Capacity Performance Resource" shall have the same meaning specified in Tariff, Attachment DD, section 5.5A.

Secondary Reserve:

"Secondary Reserve" shall mean the reserve capability of generation resources that can be converted fully into energy or Economic Load Response Participant resources whose demand can be reduced within 30 minutes (less the capability of such resources to provide Primary Reserve), from the request of the Office of the Interconnection, regardless of whether the equipment providing the reserve is electrically synchronized to the Transmission System or not.

Secondary Systems:

"Secondary Systems" shall mean control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers.

Second Incremental Auction:

"Second Incremental Auction" shall mean an Incremental Auction conducted ten months before the Delivery Year to which it relates**.**

Security:

"Security" shall mean the security provided by the New Service Customer pursuant to Tariff, section 212.4 or Tariff, Part VI, section 213.4 to secure the New Service Customer's responsibility for Costs under the Interconnection Service Agreement or Upgrade Construction Service Agreement and Tariff, Part VI, section 217.

Segment:
"Segment" shall have the same meaning as described in Operating Agreement, Schedule 1, section 3.2.3(e).

Self-Supply:

"Self-Supply" shall mean Capacity Resources secured by a Load-Serving Entity, by ownership or contract, outside a Reliability Pricing Model Auction, and used to meet obligations under this Attachment or the Reliability Assurance Agreement through submission in a Base Residual Auction or an Incremental Auction of a Sell Offer indicating such Market Seller's intent that such Capacity Resource be Self-Supply. Self-Supply may be either committed regardless of clearing price or submitted as a Sell Offer with a price bid. A Load Serving Entity's Sell Offer with a price bid for an owned or contracted Capacity Resource shall not be deemed "Self-Supply," unless it is designated as Self-Supply and used by the LSE to meet obligations under this Attachment or the Reliability Assurance Agreement.

Sell Offer:

"Sell Offer" shall mean an offer to sell Capacity Resources in a Base Residual Auction, Incremental Auction, or Reliability Backstop Auction.

Service Agreement:

"Service Agreement" shall mean the initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the Transmission Provider for service under the Tariff.

Service Commencement Date:

"Service Commencement Date" shall mean the date the Transmission Provider begins to provide service pursuant to the terms of an executed Service Agreement, or the date the Transmission Provider begins to provide service in accordance with Tariff, Part II, section 15.3 or Tariff, Part III, section 29.1.

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

"Short-Term Firm Point-To-Point Transmission Service" shall mean Firm Point-To-Point Transmission Service under Tariff, Part II with a term of less than one year.

Short-term Project:

"Short-term Project" shall have the same meaning provided in the Operating Agreement.

Short-Term Resource Procurement Target:

"Short-Term Resource Procurement Target" shall mean, for Delivery Years through May 31, 2018, as to the PJM Region, for purposes of the Base Residual Auction, 2.5% of the PJM Region Reliability Requirement determined for such Base Residual Auction, for purposes of the First Incremental Auction, 2% of the of the PJM Region Reliability Requirement as calculated at the time of the Base Residual Auction; and, for purposes of the Second Incremental Auction, 1.5% of the of the PJM Region Reliability Requirement as calculated at the time of the Base Residual Auction; and, as to any Zone, an allocation of the PJM Region Short-Term Resource Procurement Target based on the Preliminary Zonal Forecast Peak Load, reduced by the amount of load served under the FRR Alternative. For any LDA, the LDA Short-Term Resource Procurement Target shall be the sum of the Short-Term Resource Procurement Targets of all Zones in the LDA.

Short-Term Resource Procurement Target Applicable Share:

"Short-Term Resource Procurement Target Applicable Share" shall mean, for Delivery Years through May 31, 2018: (i) for the PJM Region, as to the First and Second Incremental Auctions, 0.2 times the Short-Term Resource Procurement Target used in the Base Residual Auction and, as to the Third Incremental Auction for the PJM Region, 0.6 times such target; and (ii) for an LDA, as to the First and Second Incremental Auctions, 0.2 times the Short-Term Resource Procurement Target used in the Base Residual Auction for such LDA and, as to the Third Incremental Auction, 0.6 times such target.

Site:

"Site" shall mean all of the real property, including but not limited to any leased real property and easements, on which the Customer Facility is situated and/or on which the Customer Interconnection Facilities are to be located.

Small Commercial Customer:

"Small Commercial Customer," as used in RAA, Schedule 6 and Tariff, Attachment DD-1, shall mean a commercial retail electric end-use customer of an electric distribution company that participates in a mass market demand response program under the jurisdiction of a RERRA and satisfies the definition of a "small commercial customer" under the terms of the applicable RERRA's program, provided that the customer has an annual peak demand no greater than 100kW.

Small Generation Resource:

"Small Generation Resource" shall mean an Interconnection Customer's device of 20 MW or less for the production and/or storage for later injection of electricity identified in an Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities. This term shall include Energy Storage Resources and/or other devices for storage for later injection of energy.

Small Inverter Facility:

"Small Inverter Facility" shall mean an Energy Resource that is a certified small inverter-based facility no larger than 10 kW.

Small Inverter ISA:

"Small Inverter ISA" shall mean an agreement among Transmission Provider, Interconnection Customer, and Interconnected Transmission Owner regarding interconnection of a Small Inverter Facility under Tariff, Part IV, section 112B.

Special Member:

"Special Member" shall mean an entity that satisfies the requirements of Operating Agreement, Schedule 1, section 1.5A.02, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.5A.02, or the special membership provisions established under the Emergency Load Response and Pre-Emergency Load Response Programs.

Spot Market Backup:

"Spot Market Backup" shall mean the purchase of energy from, or the delivery of energy to, the PJM Interchange Energy Market in quantities sufficient to complete the delivery or receipt obligations of a bilateral contract that has been curtailed or interrupted for any reason.

Spot Market Energy:

"Spot Market Energy" shall mean energy bought or sold by Market Participants through the PJM Interchange Energy Market at System Energy Prices determined as specified in Operating Agreement, Schedule 1, section 2, and the parallel provisions of Tariff, Attachment K-Appendix, section 2.

Start Additional Labor Costs:

"Start Additional Labor Costs" shall mean additional labor costs for startup required above normal station manning levels.

Start-Up Costs:

"Start-Up Costs" shall mean the unit costs to bring the boiler, turbine and generator from shutdown conditions to the point after breaker closure which is typically indicated by telemetered or aggregated state estimator megawatts greater than zero and is determined based on the cost of start fuel, total fuel-related cost, performance factor, electrical costs (station service), start maintenance adder, and additional labor cost if required above normal station manning. Start-Up Costs can vary with the unit offline time being categorized in three unit temperature conditions: hot, intermediate and cold.

State:

"State" shall mean the District of Columbia and any State or Commonwealth of the United States.

State Commission:

"State Commission**"** shall mean any state regulatory agency having jurisdiction over retail electricity sales in any State in the PJM Region.

State Estimator:

"State Estimator" shall mean the computer model of power flows specified in Operating Agreement, Schedule 1, section 2.3 and the parallel provisions of Tariff, Attachment K-Appendix, section 2.3.

Station Power:

"Station Power" shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Region or for the heating, lighting, air-conditioning and

office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy (i) used to power synchronous condensers; (ii) used for pumping at a pumped storage facility; (*iii*) used in association with restoration or black start service*; or (iv) that is Direct Charging Energy*.

Sub-Annual Resource Constraint:

"Sub-Annual Resource Constraint" shall mean, for the 2017/2018 Delivery Year and for FRR Capacity Plans the 2017/2018 and 2018/2019 Delivery Years, for the PJM Region or for 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 and Extended Summer Demand Resources for the 2017/2018 Delivery Year in the PJM Region or in such LDA, calculated as the Sub-Annual Resource Reliability Target for the PJM Region or for such LDA, respectively, minus the Short-Term Resource Procurement Target for the PJM Region or for such LDA, respectively.

Sub-Annual Resource Price Decrement:

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

Sub-Annual Resource Reliability Target:

"Sub-Annual Reliability Target" for the PJM Region or an LDA, shall mean the maximum amount of the combination of Extended Summer Demand Resources and Limited Demand Resources in Unforced Capacity determined by PJM to be consistent with the maintenance of reliability, stated in Unforced Capacity, that shall be used to calculate the Minimum Annual Resource Requirement for Delivery Years through May 31, 2017 and the Sub-Annual Resource Constraint for the 2017/2018 and 2018/2019 Delivery Years. As more fully set forth in the PJM Manuals, PJM calculates the Sub-Annual Resource Reliability Target, by first determining a reference annual loss of load expectation ("LOLE") assuming no Demand Resources. The calculation for the unconstrained portion of the PJM Region uses a daily distribution of loads under a range of weather scenarios (based on the most recent load forecast and iteratively shifting the load distributions to result in the Installed Reserve Margin established for the Delivery Year in question) and a weekly capacity distribution (based on the cumulative capacity availability distributions developed for the Installed Reserve Margin study for the Delivery Year in question). The calculation for each relevant LDA uses a daily distribution of loads under a range of weather scenarios (based on the most recent load forecast for the Delivery Year in question) and a weekly capacity distribution (based on the cumulative capacity availability distributions developed for the Capacity Emergency Transfer Objective study for the Delivery Year in question). For the relevant LDA calculation, the weekly capacity distributions are adjusted to reflect the Capacity Emergency Transfer Limit for the Delivery Year in question.

For both the PJM Region and LDA analyses, PJM then models the commitment of varying amounts of DR (displacing otherwise committed generation) as interruptible from May 1 through October 31 and unavailable from November 1 through April 30 and calculates the LOLE at each DR level. The Extended Summer DR Reliability Target is the DR amount, stated as a percentage of the unrestricted peak load, that produces no more than a ten percent increase in the LOLE, compared to the reference value. The Sub-Annual 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].

Sub-meter:

"Sub-meter" shall mean a metering point for electricity consumption that does not include all electricity consumption for the end-use customer as defined by the electric distribution company account number. PJM shall only accept sub-meter load data from end-use customers for measurement and verification of Regulation service as set forth in the Economic Load Response rules and PJM Manuals.

Summer-Period Capacity Performance Resource:

"Summer-Period Capacity Performance Resource" shall have the same meaning specified in Tariff, Attachment DD, section 5.5A.

Surplus Interconnection Service:

"Surplus Interconnection Service" shall mean any unneeded portion of Interconnection Service established in an Interconnection Service Agreement, such that if Surplus Interconnection Service is utilized, the total amount of Interconnection Service at the Point of Interconnection would remain the same.

Switching and Tagging Rules:

"Switching and Tagging Rules" shall mean the switching and tagging procedures of Interconnected Transmission Owners and Interconnection Customer as they may be amended from time to time.

Synchronized Reserve:

"Synchronized Reserve" shall mean the reserve capability of generation resources that can be converted fully into energy or *Economic Load Response Participant r*esources whose demand can be reduced within ten minutes from the request of the Office of the Interconnection dispatcher, and is provided by equipment that is electrically synchronized to the Transmission System.

Synchronized Reserve Event:

"Synchronized Reserve Event" shall mean a request from the Office of the Interconnection to generation resources and/or *Economic Load Response Participant r*esources able, assigned or self-scheduled to provide Synchronized Reserve in one or more specified Reserve Zones or Reserve Sub-zones, within ten minutes, to increase the energy output or reduce load by the amount of assigned or self-scheduled Synchronized Reserve capability.

Synchronized Reserve Requirement:

"Synchronized Reserve Requirement" shall mean the *demand for Synchronized Reserve* in a Reserve Zone or Reserve Sub-zone*, as defined by the Operating Reserve Demand Curve for* Synchronized Reserve *resources. The requirement can only be satisfied by Synchronized Reserve resources*.

System Condition:

"System Condition" shall mean a specified condition on the Transmission Provider's system or on a neighboring system, such as a constrained transmission element or flowgate, that may trigger Curtailment of Long-Term Firm Point-to-Point Transmission Service using the curtailment priority pursuant to Tariff, Part II, section 13.6. Such conditions must be identified in the Transmission Customer's Service Agreement.

System Energy Price:

"System Energy Price" shall mean the energy component of the Locational Marginal Price, which is the price at which the Market Seller has offered to supply an additional increment of energy from a resource, calculated as specified in Operating Agreement, Schedule 1, section 2 and the parallel provisions of Tariff, Attachment K-Appendix, section 2.

System Impact Study:

"System Impact Study" shall mean an assessment by the Transmission Provider of (i) the adequacy of the Transmission System to accommodate a Completed Application, an Interconnection Request or an Upgrade Request, (ii) whether any additional costs may be incurred in order to provide such transmission service or to accommodate an Interconnection Request, and (iii) with respect to an Interconnection Request, an estimated date that an Interconnection Customer's Customer Facility can be interconnected with the Transmission System and an estimate of the Interconnection Customer's cost responsibility for the interconnection; and (iv) with respect to an Upgrade Request, the estimated cost of the requested system upgrades or expansion, or of the cost of the system upgrades or expansion, necessary to provide the requested incremental rights.

System Protection Facilities:

"System Protection Facilities" shall refer to the equipment required to protect (i) the Transmission System, other delivery systems and/or other generating systems connected to the

Transmission System from faults or other electrical disturbance occurring at or on the Customer Facility, and (ii) the Customer Facility from faults or other electrical system disturbance occurring on the Transmission System or on other delivery systems and/or other generating systems to which the Transmission System is directly or indirectly connected. System Protection Facilities shall include such protective and regulating devices as are identified in the Applicable Technical Requirements and Standards or that are required by Applicable Laws and Regulations or other Applicable Standards, or as are otherwise necessary to protect personnel and equipment and to minimize deleterious effects to the Transmission System arising from the Customer Facility.

12.1 Internal Dispute Resolution Procedures:

Any dispute between a Transmission Customer or New Service Customer, an affected Transmission Owner, or the Transmission Provider involving transmission or interconnection service under the Tariff (excluding applications for rate changes or other changes to the Tariff, or to any Service Agreement entered into under the Tariff, which shall be presented directly to the Commission for resolution) shall be referred to a designated senior representative of each of the parties to the dispute for resolution on an informal basis as promptly as practicable. In the event the designated representatives are unable to resolve the dispute within thirty (30) days (or such other period as the parties to the dispute may agree upon) by mutual agreement, such dispute may be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below.

12.2 External Arbitration Procedures:

Any arbitration initiated under the Tariff shall be conducted before a single neutral arbitrator appointed by the parties to the dispute. If the parties to the dispute fail to agree upon a single arbitrator within ten (10) days of the referral of the dispute to arbitration, the party or parties to the dispute demanding arbitration shall ~~chose~~ choose one arbitrator and the party or parties responding to the demand for arbitration shall choose another arbitrator, each of whom shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the parties to the dispute an opportunity to be heard and, except as otherwise provided herein, shall generally conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association and any applicable Commission regulations.

36.1 General:

Generation Interconnection Requests and Transmission Interconnection Requests shall be governed by ~~this~~ Tariff, Part IV, Subpart A, ~~S~~section 36.

36.1.01 Generation Interconnection Request:

Except as otherwise provided in this Subpart A with respect to Behind The Meter Generation, an Interconnection Customer that seeks to interconnect new generation in, ~~or~~ to increase the capacity of generation already interconnected in, or request Surplus Interconnection Service in the PJM Region shall submit to the Transmission Provider a Generation Interconnection Request. The Transmission Provider shall acknowledge receipt of the Generation Interconnection Request (electronically when available to all parties, otherwise written) within five Business Days after receipt of the request and shall attach a copy of the received Generation Interconnection Request to the Transmission Provider's acknowledgment.

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

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

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

   c. the MW size of the proposed ~~generating unit~~Generating Facility or the amount of increase in MW capability of an existing ~~generating unit~~Generating Facility, and except for a request for Surplus Interconnection Service, identification of any MW portion of the facility's capability that will be a Capacity Resource; and

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

   e. a description of the equipment configuration, and a set of preliminary electrical design specifications, and, if the generating unit is a wind generation facility, then the set of preliminary electrical design

specifications must depict the wind plant as a single equivalent generator; and

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

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

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

i. Deposit.

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

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

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

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

each MW requested, if the Generation Interconnection Request is received in the sixth calendar month of the current New Services Queue.

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

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

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

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

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

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

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

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

(4) If the Generation Interconnection Request is deemed to be modified (pursuant to Tariff, Part IV, Subpart A, ~~S~~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 Feasibility Study period, the refundable deposit money shall be applied to cover all of the costs incurred by the Transmission Provider up to the point of such Generation Interconnection Request being modified, rejected, terminated and/or withdrawn, and any remaining refundable deposit monies shall be applied to cover:

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

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

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

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

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

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

(2) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior Generation Interconnection Requests by the Interconnection Customer.

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

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

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

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

k. Indication whether the Interconnection Customer is requesting Surplus Interconnection Service; and, if so, identification of the specific, existing Generating Facility providing Surplus Interconnection Service, including whether the Interconnection Customer requesting Surplus Interconnection Service is the owner or affiliate of the existing Generating Facility. If a third party, must include evidence of permission from the existing owner of the Generating Facility to utilize the existing Generating Facility's Surplus Interconnection Service must be submitted with this request.

2. Deficiency Review. Within five Business Days of the Interconnection Customer submitting a Generation Interconnection Request, Transmission Provider shall provide a deficiency review of the Generation Interconnection Request to determine whether the Interconnection Customer submitted a valid Generation Interconnection Request.

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

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

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

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

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

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

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

study costs within ten Business Days of Transmission Provider sending the Interconnection Customer notification of such estimated additional study costs, then the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

c. If there are deficiencies in the Generation Interconnection Request for any of the requirements set forth above, the Transmission Provider shall notify the Interconnection Customer (electronically when available to all parties, otherwise written) within five Business Days of receipt of the Generation Interconnection Request that such Generation Interconnection Request is deficient. This notification is referred to as a deficiency notice.

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

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

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

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

iii. Without regard to the timing of the Interconnection Customer's deficiency response period, the Transmission Provider shall have an additional five Business Days to review each Interconnection Customer's response to the deficiency notice. If the Generation Interconnection Request is still deficient after the Transmission Provider's additional five Business Day review and the full ten Business Days of the Interconnection Customer's deficiency response period have expired, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

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

Transmission Provider's deficiency notice), the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

3. Any Queue Position for which an Interconnection Customer has not cleared the deficiencies before the close of the relevant New Services Queue shall be deemed to be terminated and withdrawn, even if the deficiency response period for such Queue Position does not expire until after the close of the relevant New Services Queue.

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

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

6. Transmission Provider Website Postings.

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

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

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

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

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

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

      vi. the type of Generation Interconnection Service requested;

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

      viii. the date of the Generation Interconnection Request;

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

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

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

36.1.02 Generation Interconnection Requests of 20 Megawatts or Less:

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

36.1.03 Transmission Interconnection Request:

An Interconnection Customer that seeks to interconnect or add Merchant Transmission Facilities to the Transmission System, or to increase the capacity of existing Merchant Transmission Facilities interconnected with the Transmission System shall submit to the Transmission Provider a Transmission Interconnection Request. The Transmission Provider shall acknowledge receipt of the Transmission Interconnection Request (electronically when available to all parties, otherwise written) within five Business Days after receipt of the request and shall attach a copy of the received Transmission Interconnection Request to the Transmission Provider's acknowledgment.

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

a. the location of the proposed Merchant Transmission Facilities and of the substation(s) or other location(s) where the Transmission Interconnection Customer proposes to interconnect or add its Merchant Transmission Facilities to the Transmission System; and

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

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

d. the planned date the proposed Merchant Transmission Facilities will be in service, such date to be no more than seven years from the date the request is received by the Transmission Provider, unless the Transmission Interconnection Customer demonstrates that engineering, permitting, and construction of the Merchant Transmission Facilities will take more than seven years; and

e. if the request relates to proposed Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that will interconnect with the Transmission System and with another control area outside the PJM Region, the Transmission Interconnection Customer's election to receive either; and

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

ii. Incremental Deliverability Rights, Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Available Transfer Capability Revenue Rights, associated with the capability of the proposed Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities;

f. if the Transmission Interconnection Customer will be eligible to receive Incremental Deliverability Rights under Tariff, Part VI, Subpart C, ~~S~~section 235 ~~of the Tariff~~, identification of the point on the Transmission System where the Transmission Interconnection Customer wishes to receive Incremental Deliverability Rights created by the construction or installation of its proposed Merchant Transmission Facilities; and

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

h. Deposit.

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

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

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

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

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

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

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

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

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

refundable portion of each total deposit amount to cover the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2. Deficiency Review. Within five Business Days of the Interconnection Customer submitting a Transmission Interconnection Request, the Transmission Provider shall provide a deficiency review of the Transmission Interconnection Request to determine whether the Interconnection Customer submitted a valid Transmission Interconnection Request.

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

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

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

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

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

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

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

estimated additional study costs, then the Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

c. If there are deficiencies in the Transmission Interconnection Request for any of the requirements set forth above, the Transmission Provider shall notify the Interconnection Customer (electronically when available to all parties, otherwise written) within five Business Days of receipt of the Transmission Interconnection Request that such Transmission Interconnection Request is deficient. This notification is referred to as a deficiency notice.

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

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

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

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

iii. Without regard to the timing of the Interconnection Customer's deficiency response period, the Transmission Provider shall have an additional five Business Days to review the Interconnection Customer's response to the deficiency notice. If the Transmission Interconnection Request is still deficient after the Transmission Provider's additional five Business Day review and the full ten Business Days of the Interconnection Customer's deficiency response period have expired, the Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

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

Interconnection Request shall be deemed to be terminated and withdrawn.

3. Any Queue Position for which an Interconnection Customer has not cleared the deficiencies before the close of the relevant New Services Queue shall be deemed to be terminated and withdrawn, even if the deficiency response period for such Queue Position does not expire until after the close of the relevant New Services Queue.

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

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

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

7. Transmission Provider Website Postings.

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

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

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

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

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

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

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

vii. the date of the Transmission Interconnection Request;

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

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

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

36.1.03A Transmission Interconnection Customers Requesting Merchant Network Upgrades

Notwithstanding ~~S~~section 36.1.03 above, an Interconnection Customer that proposes Merchant Network Upgrades (including advancing pursuant to Tariff, Part VI, Subpart B, ~~S~~section 220 or accelerating the construction of any transmission enhancement or expansion, other than Merchant Transmission Facilities, that is included in the Regional Transmission Expansion Plan prepared pursuant to Operating Agreement, Schedule 6 ~~of the Operating Agreement~~) shall submit an Upgrade Request, with the required information and the required deposit for a System Impact Study, as set forth in Tariff, Attachment EE.

36.1.1 Interconnection Services for Generation:

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

System Impact Study will identify those upgrades required to satisfy the contingency criteria applicable at the generator's location.

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

36.1.1A Service Below Generating Capability

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

36.1.1B Surplus Interconnection Service

Requests for Surplus Interconnection Service may be made by the existing Interconnection Customer whose Generating Facility is already interconnected, or one of its affiliates, or by an unaffiliated Interconnection Customer. The existing Interconnection Customer or one of its affiliates has priority to use this service; however, if they do not exercise this priority, Surplus Interconnection Service requests also may be made available to an unaffiliated Interconnection Customer. Surplus Interconnection Service is limited to utilizing or transferring an existing Generating Facility's Surplus Interconnection Service at the pre-existing Point of Interconnection of the existing Generating Facility and cannot exceed the existing Generating Facility's total amount of Interconnection Service, i.e., the total amount of Interconnection Service used by the Generating Facility requesting Surplus Interconnection Service and the existing Generating Facility shall not exceed the lesser of the Maximum Facility Output stated in the existing Generating Facility's Interconnection Service Agreement or the total "as-built capability" of the existing Generating Facility. If the Generating Facility requests Surplus Interconnection Service associated with an existing Generating Facility that is an Energy Resource, the Generating Facility requesting the Surplus Interconnection Service shall be an Energy Resource; and if the existing Generating Facility is a Capacity Resource, the Generating Facility requesting Surplus

Interconnection Service associated with the Generating Facility may be an Energy Resource or a Capacity Resource (up to the amount of Capacity Interconnection Rights granted the existing Generating Facility). Surplus Interconnection Service cannot be granted if doing so would require new Network Upgrades or would have additional impacts affecting the determination of what Network Upgrades would be necessary to New Service Customers already in the interconnection queue.

36.1.2 No Applicability to Transmission Service:

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

36.1.3 [Reserved]

36.1.4 [Reserved]

36.1.5 Scoping Meeting:

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

36.1.6 Coordination with Affected Systems:

The Transmission Provider will coordinate with Affected System Operators the conduct of any required studies in accordance with Tariff, Part VI, Subpart A, ~~S~~section 202.

36.1.7 Base Case Data:

Transmission Provider shall ~~provide~~ maintain ~~Interconnection Customer with~~ base case power flow, short circuit and stability databases, including all underlying assumptions, and contingency list ~~upon request and~~ on a password-protected website, subject to the confidentiality provisions of Tariff, Part VI, Subpart B, ~~S~~section 223 ~~of the Tariff~~. In addition, Transmission Provider shall maintain base case power flows and underlying assumptions on a password-protected website. Such base case power flows and underlying assumptions should reasonably represent those used during the most recent interconnection study. Transmission Provider may require Interconnection Customers and password-protected website users to sign any required confidentiality agreement(s) before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects, that are included in the then-current, approved Regional Transmission Expansion Plan.

36.1A Behind The Meter Generation:

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

36.1A.1 Generation Interconnection Requests:

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

36.1A.2 Information Required in Generation Interconnection Requests:

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

36.1A.3 Small Generation Classification:

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

36.1A.4 Transmission Provider Determination:

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

36.1A.5 Treatment As Energy Resource:

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

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

36.1A.6 Operation as Capacity Resource:

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

36.1A.7 Other Requirements:

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

36.2 Interconnection Feasibility Study:

After receiving an Interconnection Request, except for a request for Surplus Interconnection Service, a signed Generation Interconnection Feasibility Study Agreement or Transmission Interconnection Feasibility Study Agreement, as applicable, and the applicable deposit contained in Tariff, Part IV, Subpart A, Ssections 36.1.01, Tariff, Part IV, Subpart A, section 36.1.03, Tariff, Part IV, Subpart G, section 110.1, Tariff, Part IV, Subpart G, section 111.1, and Tariff, Part IV, Subpart G, section 112.1 of the Tariff from the Interconnection Customer, and, if applicable, subject to the terms of Tariff, Part IV, Subpart A, Ssection 36.1A.5, the Transmission Provider shall conduct an Interconnection Feasibility Study to make a preliminary determination of the type and scope of Attachment Facilities, Local Upgrades, and Network Upgrades that will be necessary to accommodate the Interconnection Request and to provide the Interconnection Customer a preliminary estimate of the time that will be required to construct any necessary facilities and upgrades and the Interconnection Customer's cost responsibility, estimated consistent with Tariff, Part VI, Subpart B, Ssection 217 of the Tariff. The Interconnection Feasibility Study assesses the practicality and cost of accommodating interconnection of the generating unit or increased generating capacity with the Transmission System. The analysis is limited to load-flow analysis of probable contingencies and, for Generation Interconnection Requests, short-circuit studies. This study also focuses on determining preliminary estimates of the type, scope, cost and lead time for construction of facilities required to interconnect the project. For a Generation Interconnection Customer, the Interconnection Feasibility Study may provide separate estimates of necessary facilities and upgrades and associated cost responsibility reflecting the generating facilityGenerating Facility being designated as either a Capacity Resource or an Energy Resource. Transmission Provider shall study the Interconnection Request at the level of service requested by the Interconnection Customer, unless otherwise required to study the full electrical generating capability of the Generating Facility due to safety or reliability concerns. For purposes of determining necessary interconnection facilities and network upgrades, the Feasibility Study shall consider the level of Interconnection Service requested by the Interconnection Customer, unless otherwise required to study the full electrical generating capability of the Generating Facility due to safety or reliability concerns. The Feasibility Study will also identify all control equipment identified as necessary for requests for Interconnection Service that are lower than the full electrical generating capability of the Generating Facility. The study for the primary Point of Interconnection will be conducted as a cluster, within the project's New Services Queue. The study for the secondary Point of Interconnection will be conducted as a sensitivity analysis. The Transmission Provider shall provide a copy of the Interconnection Feasibility Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in Operating Agreement, Ssection 18.17 of the Operating Agreement, related work papers to the Interconnection Customer and the affected Transmission Owner(s). Upon completion, the Transmission Provider shall list the study and the date of the Interconnection Request to which it pertains on the Transmission Provider's website. To the extent required by Commission regulations, the Transmission Provider shall make the completed Interconnection Feasibility Study publicly available upon request, except that the identity of the Interconnection Customer shall remain confidential. The Transmission Provider shall conduct Interconnection Feasibility Studies two times each year.

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

For Interconnection Requests received during the six-month period ending October 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by the last day of February. For Interconnection Requests received during the six-month period ending April 30 the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by August 31. Following the closure of an interconnection queue on October 31 and April 30, the Transmission Provider will utilize the following one month period to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on December 1 and June 1, respectively. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

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

For Interconnection Requests received during the five-month period ending March 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by July 31. Following the closure of the relevant New Services Queue on March 31, the Transmission Provider will utilize the following one month period to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on May 1. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

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

For Interconnection Requests received during the six-month period ending September 30, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by January 31. For Interconnection Requests received during the six-month period ending March 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by July 31. Following the closure of the relevant New Services Queues on September 30 and March 31, respectively, the Transmission Provider will utilize the following months of October and April, respectively, to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on November 1 and May 1, respectively. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

36.2.1 Substitute Point:

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

36.2.2 Meeting with Transmission Provider:

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

36.2.3 Surplus Interconnection Services Requests:~~Reserved.~~

a. Feasibility Study. Feasibility Study analyses can generally be expedited by examining a limited contingency set that focuses on the impact of the Interconnection Customer's Surplus Interconnection Service Request for Surplus Interconnection Service on contingency limits in the vicinity of the combined generation resources. Studies for Surplus Interconnection Service shall consist of reactive power, short circuit/fault duty, stability analyses and any other appropriate studies. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied under off-peak conditions. Off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection Service.

b. Once the Feasibility Study is completed and no Network Upgrades are required and there are no impacts affecting the determination of what upgrades are necessary for Interconnection Customers in the interconnection queue, a Feasibility Study report will be prepared and issued to the Interconnection Customer along with an executable Interconnection Service Agreement. Interconnection Customer requesting Interconnection Surplus Service shall execute the Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement be filed unexecuted in accordance with Tariff, Part VI, Subpart A, section 212.4.

c. If the Transmission Provider does not or cannot determine from the Feasibility Study whether Network Upgrades will be required or whether there are impacts affecting the determination of what upgrades are necessary for Interconnection Customers in the interconnection queue a Feasibility Study report will be prepared and issued to the Interconnection Customer along with an executable System Impact Study Agreement consistent with Tariff, Part VI, Subpart A, section 204.3

d. Deactivation of Existing Generating Facility

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

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

i. The Generating Facility receiving Surplus Interconnection Service must have been studied by Transmission Provider for the sole operation at the Point of Interconnection; and

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

(c) If the Interconnection Customer receiving Surplus Interconnection Service cannot satisfy the conditions of section 36.2.3.d(b) above, its Interconnection Service Agreement shall terminate simultaneously with the termination of the Interconnection Service Agreement of the existing Generating Facility from which Surplus Interconnection Service was provided.

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

The following language for 36.2A.1 and 36.2A.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 generating facility capability or Maximum Facility Output ~~output~~ (MW) (in the case of a Generation Interconnection Request), through either (1) decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A or the capability (in the case of a Transmission Interconnection Request) without losing its current Queue Position. For Interconnection Requests received in months one through five of the New Services Queue the Interconnection Customer must identify this change prior to the close of business on the last day of the sixth month of the New Services Queue. For Interconnection Requests received during the sixth month of the New Services Queue the Interconnection Customer must identify this change no later than close of business on the day following the completion of the scoping meeting.

36.2A.1.2 After the start of the Feasibility Study, but prior to the return of the executed System Impact Study Agreement to the Transmission Provider, an Interconnection Customer may modify its project to reduce the size of the project as provided in this section 36.2A.1.2, subject to the limitation described in section 36.2A.6 below. The Interconnection Customer may reduce its project by up to 15 percent of the electrical generating facility capability or Maximum Facility O~~o~~utput (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A ~~-~~or capability (in the case of a Transmission Interconnection Request) of the proposed project. For a request to reduce by more than 15 percent, an Interconnection Customer must request the Transmission Provider to evaluate if such a change would be a Material Modification and the Transmission Provider will allow the Interconnection Customer to reduce the size of its project: (i) to any size if the Transmission Provider determines the change is not a Material Modification; or (ii) by up to 60 percent of the electrical generating facility capability or Maximum Facility ~~o~~Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A) or capability (in the case of a Transmission Interconnection Request) if the Transmission Provider determines the change is a Material Modification, however, such a project that falls within this subsection (ii) would be removed from its current Queue Position and will be assigned a new Queue Position at the beginning of the subsequent queue and a new Interconnection Feasibility Study will be performed consistent with the timing of studies for projects submitted in the subsequent queue. All projects assigned such new Queue Positions will retain their priority with respect to each other in their newly assigned queue and with respect to all later queue projects in subsequent queues, but will lose their priority with respect to other projects in the queue to which they were previously assigned. For increases in generating capacity or transmission capability, the Interconnection Customer must submit a new Interconnection Request for the additional capability and shall be assigned a new Queue Position for the additional capability.

36.2A.1.3 Modification of Interconnection Request for Technological Changes

For a request to modify a project to include a technological advancement, no later than the return of the executed System Impact Study Agreement to the Transmission Provider an Interconnection Customer may modify its project submitted in its Interconnection Request to include a technological advancement by including the new data associated with advancements to turbines, inverters, plant supervisory controls or other similar advancements to the existing technology at the same time the Interconnection Customer submits its executed System Impact Study Agreement. The System Impact Study data associated with the requested technological change must be submitted via the PJM website as specified in the PJM Manuals.

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

36.2A.3

Prior to making any modifications other than those specifically permitted by s~~S~~ections 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 sSection 36.2A.3, any change to the Point of Interconnection (other than a change deemed acceptable under sSections 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 sSection 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.

40 Non-Binding Dispute Resolution Procedures:

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

41 Interconnection Study Statistics

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

41.1 Interconnection Feasibility Studies Processing Time:

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

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

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

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

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

41.2 Interconnection System Impact Studies Processing Time:

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

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

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

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

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

41.3 Interconnection Facilities Studies Processing Time:

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

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

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

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

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

41.4 Interconnection Service Requests Withdrawn from Interconnection Queue:

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

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

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

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

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

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

41.5 Posting Requirements

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

41.6 Additional Compliance Requirements

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

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

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

42 – 108 [Reserved.]

205.2 Scope of Studies:

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

205.2.1 Contingent Facilities

Transmission Provider shall identify the Contingent Facilities to be provided to Interconnection Customer in the System Impact Study by reviewing unbuilt Interconnection Facilities and/or Network Upgrades (including those still subject to cost allocation in accordance with the PJM Manuals) associated with another Interconnection Customer with a higher queue priority upon which the Interconnection Customer's cost, timing and study findings are dependent and, if delayed or not built, could cause a need for interconnection restudies of the Interconnection

Request or reassessment of the unbuilt Interconnection Facilities and/or Network Upgrades. Transmission Provider shall include the list of the Contingent Facilities in the System Impact Study, Facilities Study, if applicable, and Interconnection Service Agreement, including why a specific Contingent Facility was identified and how it relates to the Interconnection Request. Transmission Provider shall also provide, upon request of the Interconnection Customer, the estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and non-commercially sensitive.

207 Facilities Study Procedures:

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

212 Interconnection Service Agreement:

Notwithstanding any other provision of the Tariff, this sSection 212 shall apply only to Interconnection Customers, excluding those that are proposing Merchant Network Upgrades only for which Tariff, Part VI, Subpart B, sSection 213 shall apply. Upon completion of the Facilities Study (or, if no Facilities Study was required, upon completion of the System Impact Study), the Transmission Provider shall tender to each Interconnection Customer an Interconnection Service Agreement (in the form included in Attachment O to the Tariff) to be executed by the Interconnection Customer, the Interconnected Transmission Owner and the Transmission Provider. The Transmission Provider shall provide the Interconnected Transmission Owner with a copy of the Interconnection Service Agreement when this agreement is provided to the Interconnection Customer for execution. In order to exercise Option to Build, as set forth in Interconnection Construction Service Agreement, Tariff, Attachment P, Appendix 2, section 3.2.3.1, Interconnection Customer must provide Transmission Provider and the Interconnected Transmission Owner with written notice of its election to exercise the option no later than thirty (30) days from the date the Interconnection Customer receives the results of the Facilities Study (or, if no Facilities Study was required, completion of the System Impact Study). Interconnection Customer may not elect Option to Build after such date.

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~~Costs, determined in accordance with Tariff, Part VI, Subpart B, ~~S~~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 Interconnection Construction Service Agreement, Tariff, Attachment P, Appendix 2, ~~S~~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~~Interconnected Transmission Owner's ~~Costs~~ oversight costs (i.e., costs incurred by the Interconnected 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) associated with the Interconnection Customer~~'s~~ building ~~such Attachment Facilities, Local Upgrades, and~~Transmission Owner Attachment Facilities and Direct Connection Network Upgrades, including ~~but not limited to Costs for~~ tie-in work and Cancellation Costs. Interconnected Transmission Owner oversight costs shall be consistent with Tariff, Attachment P, Appendix 2, section 3.2.3.2(a)(12). ~~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~~ shall inform the Transmission Provider of the rate agreed upon~~,~~ and ~~the Interconnection Service Agreement shall specify an appropriate~~such rate ~~that will directly assign and enable the affected Transmission Owner to recover the costs of the pertinent facilities and upgrades~~shall be specified in the Interconnection Service Agreement, Specifications section. In addition ~~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~~ Interconnected Transmission Owner is responsible for building pursuant to the Interconnection Construction Service Agreement are made. The Transmission Provider shall distribute the revenues received under this s~~S~~ection 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 Tariff, Part VI, Preamble, Ssection 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 or, if a Surplus Interconnection Service Request, after receipt of the Feasibility 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 Tariff, Part I, Ssection 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, 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 or, if a Surplus Interconnection Service Request, after receipt of the Feasibility Study), the Interconnection Customer must have met the milestones specified in Tariff, Part VI, Subpart B, Ssection 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 Tariff, Part VI, Subpart B, Ssection 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 Interconnection Construction Service Agreement, Tariff, Attachment P, Appendix 2, Ssection 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 theoversight 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) associated with Interconnection Customer building Transmission Owner Attachment Facilities and Direct Connection Network Upgrades, 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)~~. Interconnected Transmission Owner oversight costs shall be consistent with Tariff, Attachment P, Appendix 2, section 3.2.3.2(a)(12). 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 the Interconnection Service Agreement, Tariff, Attachment O, Appendix 2, S~~s~~ection 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 Tariff, Attachment O, Appendix 2, S~~s~~ection 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 s~~S~~ection 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 Tariff, Part VI, Subpart B, ~~S~~section 212.5, or provide the security prescribed in this ~~S~~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 Tariff, Part VI, 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 Tariff, Part VI, Preamble, ~~S~~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 ~~S~~section 212.4.

213 Upgrade Construction Service Agreement:

Notwithstanding any other provision of the Tariff, this sSection 213 shall apply only with respect to (a) Interconnection Customers that are proposing Merchant Network Upgrades only, and (b) all other New Service Customers that are not Interconnection Customers. For all New Service Requests of New Service Customers subject to this section and for which construction of facilities is required, upon completion of the Facilities Study (or, if no Facilities Study was required, upon completion of the System Impact Study), the Transmission Provider shall tender to the New Service Customer an Upgrade Construction Service Agreement (in the form included in Tariff, Attachment GG to the Tariff), to be executed by the New Service Customer, the Transmission Owner whose facilities are affected by such construction, and the Transmission Provider. In the event that construction of facilities by more than one Transmission Owner is required, the Transmission Provider will tender a separate Upgrade 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 Upgrade Construction Service Agreement when this agreement is provide to the New Service Customer for execution. In order to exercise Option to Build, as set forth in Upgrade Construction Service Agreement, Tariff, Attachment GG, Appendix III, section 6.2.1, New Service Customer must provide Transmission Provider and the Interconnected Transmission Owner with written notice of its election to exercise the option no later than thirty (30) days from the date the New Service Customer receives the results of the Facilities Study (or, if no Facilities Study was required, completion of the System Impact Study). New Service Customer may not elect Option to Build after such date.

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~~Costs, determined in accordance with Tariff, Part VI, Subpart B, ~~S~~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 Interconnected Transmission Owner is responsible for building such facilities pursuant to Tariff, 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 the Upgrade Construction Service Agreement, Tariff, Attachment GG, Appendix III, ~~S~~section 6.2.1 ~~of Appendix III of the form of Upgrade Construction Service Agreement (set forth in Attachment GG to the Tariff)~~, ~~the~~ Interconnected Transmission Owner's ~~Costs~~ oversight costs (i.e., costs incurred by the Interconnected Transmission Owner when engaging in oversight activities to satisfy itself that the New Service Customer is complying with the Interconnected Transmission Owner's standards and specifications for the construction of facilities) associated with the New Service Customer's building ~~such~~ Direct Assignment Facilities, ~~Local Upgrades,~~ and/or Customer-Funded Upgrades that are Direct Connection Network Upgrades, including ~~but not limited to~~ Costs for tie-in work and Cancellation Costs. Interconnected Transmission Owner's oversight costs shall be consistent with Attachment GG, Appendix III, section 6.2.2(a)(12). New Service Customer and the affected Transmission Owner shall inform the Transmission Provider of the rate agreed upon and such rate shall be specified in the Upgrade Construction Service Agreement, Appendix I.~~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 s~~S~~ection 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 Tariff, Part VI, Preamble, Ssection 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 Tariff, Part I, Ssection 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, 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 Tariff, Part VI, Subpart B, Ssection 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 Upgrade Construction Service Agreement, Tariff, Attachment GG, Appendix III, Ssection 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 oversight Costs 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). Interconnected Transmission Owner oversight costs shall be consistent with Tariff, Attachment GG, Appendix III, section 6.2.2(a)(12). 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 Tariff, Attachment GG, Appendix III, Ssection 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 Tariff, Attachment GG, Appendix III, Ssection 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 Tariff, Part VI, Preamble, ~~S~~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 ~~S~~section.

ATTACHMENT N
Form of
Generation Interconnection Feasibility Study Agreement

RECITALS

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

2. By submitting this Agreement and complying with Section 36.1.01, 110.1, 111.1, or 112.1, as applicable, of the PJM Tariff, the Interconnection Customer has submitted an Interconnection Request. In accordance with Section 36.1.01, 110.1, 111.1, or 112.1, as applicable, of the PJM Tariff, the Interconnection Customer has also submitted with this Agreement the applicable required deposit to the Transmission Provider.

3. By submitting this Agreement to the Transmission Provider, the Interconnection Customer requests interconnection to the Transmission System of a generating project with the following specifications:

   a. Location of generating unit site (include both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the generating unit site):

   _____

   _____

   b. Identification of evidence of ownership interest in, or right to acquire or control, the generating site for a minimum of three years for large generation, or for a minimum of two years for small generation. Include both a written description of the evidence to be relied upon and attach a Word or PDF version copy thereof. If the evidence of ownership interest in, or right to acquire or control the generating site is not yet available, provide a detailed explanation of why such evidence is not available and provide a good faith estimated date upon which such evidence shall be submitted to the Transmission Provider. Though site control evidence may be submitted separately from this Agreement, the Interconnection Request is still subject to the overall deficiency review period and deficiency response period time constraints provided for in Section 36.1.01, 110.1, 111.1, or 112.1, as applicable, of the PJM Tariff, and shall not be assigned a Queue Position without site control evidence acceptable to the Transmission Provider.:

_____

_____

c. Specification of Requested Maximum Facility Output and Requested Capacity Interconnection Rights. The requested Maximum Facility Output megawatts and requested Capacity Interconnection Rights megawatts indicated in this section may be reduced as this Interconnection Request proceeds in the Transmission Provider Interconnection Request process, but may not be increased after this Agreement is submitted to the Transmission Provider.

i. For new generating units, complete the following chart:

Total Requested Maximum Facility Output (as defined in the PJM Tariff) in Megawatts	
Total Requested Capacity Interconnection Rights (as defined in the PJM Tariff) in Megawatts	

ii. For existing generating units that will be adding megawatt capability, complete the following chart:

	Existing Facility	Proposed Facility Incremental Increase	Total
Maximum Facility Output (as defined in the PJM Tariff) in Megawatts			
Capacity Interconnection Rights (as defined in the PJM Tariff) in Megawatts			

iii. For new Behind The Meter generating units, complete the following chart:

Gross Generator Output in Megawatts	
Behind the Meter Load in Megawatts (the sum of the MW generation auxiliary load and any other MW load to be served behind the Point of Interconnection)	
Total Requested Maximum Facility Output (as defined in the PJM Tariff) in Megawatts	
Total Requested Capacity Interconnection Rights (as defined in the PJM Tariff) in Megawatts	

iv. For existing Behind The Meter generating units that will be adding megawatt capability, complete the following chart:

	Existing Facility	Requested Facility Increase	Total
Gross Generator Output in Megawatts			
Behind the Meter Load in Megawatts (the sum of the MW generation auxiliary load and any other MW load to be served behind the Point of Interconnection)			
Maximum Facility Output (as defined in the PJM Tariff) to be exported from the Behind the Meter Generator onto the PJM System, in Megawatts			
Capacity Interconnection Rights, in Megawatts			

d. Identify the fuel type of the new or existing generating unit:

_____

e. A PDF format attachment of the site plan/single line diagram together with a description of the equipment configuration, including a set of preliminary electrical design specifications, and if the generating unit is a wind generation facility, then also submit a set of preliminary electrical design specifications depicting the wind generation facility as a single equivalent generator:

_____

_____

f. Planned date the new generating unit or increase in capability will be in service:

_____

_____

g. Other related information, including for example, but not limited to, identifying: all of Interconnection Customer's prior Queue Positions; stating whether the Interconnection Customer has submitted a previous Interconnection Request for this particular project; and, if this Interconnection Request proposes an increase in capability to an existing generating unit, then identify whether the existing generating unit is subject to an existing Interconnection Agreement and/or Power Purchase Agreement:

_____

_____

h. Is this a request for Surplus Interconnection Service?

Yes No

If yes, please complete sections 3a, b, d, e, f, and g in relation to the existing generation facility. In addition, please complete the following chart:

	Existing Facility	**Facility Requesting Surplus Interconnection Service**
Owner/relationship		
Point of Interconnection		
MW capability of the generation units		
Maximum Facility Output		
Interconnection Service Requested		
Circumstances under which Surplus Interconnection Service will be available at the POI		

If the owner of the facility requesting Surplus Interconnection Service is not the owner/affiliate of the existing facility, Interconnection Customer must provide the following documentation acceptable to PJM:

1. Written documentation that the owner of the existing facility has granted permission for Interconnection Customer to request Surplus Interconnection Service from the existing facility; and

2. The parties have entered into or will enter into prior to execution of an Interconnection Service Agreement of a shared facilities agreement.

THE FOLLOWING APPLIES TO BEHIND THE METER GENERATION:

a. If Behind the Meter Generation is identified in this Agreement, all of the requirements in Section 36.1A of the PJM Tariff must also be met.

b. Identify the type and size of the load located (or to be located) at the site of such generation, and attach a PDF format single line diagram depicting the location of the load in relation to the site of such generation:

_____

_____

c. Describe the electrical connections between the generation facility and the load.

_____

_____

THE FOLLOWING APPLIES TO ENERGY STORAGE RESOURCES:

Primary frequency response operating range for Energy Storage Resources:
Minimum State of Charge: _____; and
Maximum State of Charge: _____.

PURPOSE OF THE FEASIBILITY STUDY

4. Consistent with Section 36.2 of the PJM Tariff, the Transmission Provider shall conduct a Generation Interconnection Feasibility Study to provide the Interconnection Customer with preliminary determinations of: (i) the type and scope of the Attachment Facilities, Local Upgrades, and 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 Generation Interconnection Feasibility Study within the timeframe prescribed in Section 36.2 of the PJM Tariff, the Transmission Provider shall notify the Interconnection Customer and explain the reasons for the delay.

5. The Generation 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 Generation 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 Generation 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 Generation Interconnection Feasibility Study. Subject to paragraph 7 of this 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 Generation Interconnection Feasibility Study, the Transmission Provider shall keep confidential all information provided to it by the Interconnection Customer. Upon completion of the Generation 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 the PJM Tariff, the Transmission Provider may contract with consultants, including the Transmission Owners, to provide services or expertise in the Generation 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 Generation Interconnection Feasibility Study. The refundable portion of the deposit paid by the Interconnection Customer described in Section 2 of this Agreement shall be applied toward the Interconnection Customer's Generation Interconnection Feasibility Study cost responsibility. Pursuant to Section 36.1.01, 110, 111, or 112 of the PJM Tariff, as applicable, 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 2 of this agreement, 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 Sections 36.1.01, 110, 111, or 112), then the Interconnection Customer must either: (1) withdraw the Generation Interconnection Request during the deficiency response period (as described in Sections 36.1.01, 110, 111, or 112); or (2) pay all additional estimated costs prior to the expiration of the deficiency response period (as described in Sections 36.1.01, 110, 111, or 112). If the Interconnection Customer fails to complete either (1) or (2),

then the Generation 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, then the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

10. In analyzing and preparing the Generation 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 Agreement nor the Generation 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 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 Generation 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 Generation 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 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 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 Agreement or any part thereof, may not be amended, modified, or waived other than by a writing signed by all Parties hereto.

15. This Agreement shall be binding upon the Parties hereto, their heirs, executors, administrators, successors, and assigns.

16. Neither this Agreement nor the Generation 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 Part IV 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 Agreement and each of its provisions shall be governed by the laws of the state of _____ (the state 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.

19. 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.

20. Multiple Counterparts

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

21. 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.

22. 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.

23. Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with the Federal Energy Regulatory Commission ("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.

CERTIFICATION

By initialing the line next to each of the following required elements, Interconnection Customer hereby certifies that it has submitted with this executed Agreement each of the required elements (if this Interconnection Request is being submitted electronically, each of

the required elements must be submitted electronically as individual PDF files, together with an electronic PDF copy of this signed Agreement):

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

_____ **Evidence of an ownership interest in, or right to acquire or control the generating unit site**

_____ **The megawatt size of the proposed generating unit or the amount of increase in megawatt capability of an existing generating unit, and identification of any megawatt portion of the facility's capability that will be a Capacity Resource**

_____ **Identification of the fuel type of the proposed generating unit or upgrade thereto**

_____ **Description of the equipment configuration and a set of preliminary electrical design specifications, and, if the generating unit is a wind generation facility, then the set of preliminary electrical design specifications must depict the wind plant as a single equivalent generator**

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

_____ **All additional information prescribed by the Transmission Provider in the PJM Manuals**

_____ **The full amount (including both the refundable and non-refundable portions) of the required deposit**

IN WITNESS WHEREOF, the Transmission Provider and the Interconnection Customer 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

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

By:_____ _____ _____
Name Title Date

_____
Printed Name

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~~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~~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: {Instructions: 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}

{OR: Instructions: 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 _____.

{OR: Instructions: include the following language when there are a combination of previously awarded CIRs and interim CIRs that have a termination date or event:}

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 ___{e.g., June 1, 2018}. From the effective date of this ISA until _____ {e.g., May 31, 2018} (the "interim time period"), in addition to the _____ MW of Capacity Interconnection Rights the Interconnection Customer had at the same Point of Interconnection prior to its Interconnection Request associated with this ISA, the Interconnection Customer also may be awarded interim Capacity Interconnection Rights in an amount not to exceed ____ MW. Accordingly, during the interim time period, the Interconnection Customer shall have ____ MW of previously awarded Capacity Interconnection Rights and 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 _____{e.g., May 31, 2018}.

{OR: Instructions: include the following language to the extent applicable for interconnection of additional generation at an existing ~~generating facility~~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.

{OR: Instructions: 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 {Instructions: 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.

{Instructions: this version of section 2.1 will be used in lieu of section 2.1 above when a ~~generating facility~~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]

d. [if applicable] Additional Contingent Facilities which must be completed prior to Commercial Operation of the Generating Facility

[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, including oversight costs for Option to Build]

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 Transmission Owner 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 (Instructions: this value should be in Section 5.0 of this ISA)

less $ Costs already paid by Interconnection Customer

$ Total Security {Instructions: **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**
- **SCHEDULE I – INTERCONNECTION SPECIFICATIONS FOR AN ENERGY STORAGE RESOURCE**
- **SCHEDULE J – SCHEDULE OF TERMS AND CONDITIONS FOR SURPLUS INTERCONNECTION SERVICE**
- **SCHEDULE K – REQUIREMENTS FOR INTERCONNECTION SERVICE BELOW FULL ELECTRICAL GENERATING CAPABILITY**

1.4A Other Interconnection Options

1.4A.1 Limited Operation:

If any of the Transmission Owner Interconnection Facilities are not reasonably expected to be completed prior to the Interconnection Customer's planned date of Initial Operation, and provided that the Interconnected Transmission Owner has accepted the Customer Interconnection Facilities pursuant to the Interconnection Construction Service Agreement, Transmission Provider shall, upon the request and at the expense of Interconnection Customer, perform appropriate power flow or other operating studies on a timely basis to determine the extent to which the Customer Facility and the Customer Interconnection Facilities may operate prior to the completion of the Transmission Owner Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and the Interconnection Service Agreement. In accordance with the results of such studies and subject to such conditions as Transmission Provider determines to be reasonable and appropriate, Transmission Provider shall (a) permit Interconnection Customer to operate the Customer Facility and the Customer Interconnection Facilities, and (b) grant Interconnection Customer limited, interim Interconnection Rights commensurate with the extent to which operation of the Customer Facility is permitted.

1.4A.2 Provisional Interconnection Service:

Upon the request of Interconnection Customer, and prior to completion of requisite Interconnection Facilities, Network Upgrades, Local Upgrades, or system protection facilities Interconnection Customer may request limited Interconnection Service at the discretion of Transmission Provider based upon an evaluation that will consider the results of available studies, which terms shall be memorialized in the Interconnection Service Agreement. Consistent with Tariff, Part VI, Subpart B, section 212.4, Interconnection Customer may execute the Interconnection Service Agreement, request dispute resolution or request that the Interconnection Service Agreement be filed unexecuted with the Commission. Transmission Provider shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if Interconnection Customer interconnects without modifications to the Generating Facility or the Transmission System. Transmission Provider shall determine whether any Interconnection Facilities, Network Upgrades, Local Upgrades, or system protection facilities that are necessary to meet the requirements of NERC, or any applicable Regional Entity for the interconnection of a new, modified and/or expanded Generating Facility are in place prior to the commencement of Interconnection Service from the Generating Facility. Where available studies indicate that such Interconnection Facilities, Network Upgrades, Local Upgrades, and/or system protection facilities that are required for the interconnection of a new, modified and/or expanded Generating Facility are not currently in place, Transmission Provider will perform a study, at the Interconnection Customer's expense, to confirm the facilities that are required for Provisional Interconnection Service. The maximum permissible output of the Generating Facility shall be studied and updated on a frequency determined by Transmission Provider and at the Interconnection Customer's expense. Interconnection Customer assumes all risk and liabilities with respect to the Provisional Interconnection Service, including changes in output limits and

Interconnection Facilities, Network Upgrades, Local Upgrades, and/or system protection facilities cost responsibilities.

4.7 Reactive Power and Primary Frequency Response

4.7.1 Reactive Power

4.7.1.1 Reactive Power Design Criteria

4.7.1.1.1 New Facilities:

For all new ~~generating facilities~~Generating Facilities to be interconnected pursuant to the Tariff, other than wind-powered and other non-synchronous generation facilities, the Generation Interconnection Customer shall design its Customer Facility to maintain a composite power delivery at continuous rated power output at a power factor of at least 0.95 leading to 0.90 lagging. For all new wind-powered and other non-synchronous generation facilities the Generation Interconnection Customer shall design its Customer Facility with the ability to maintain a composite power delivery at a power factor of at least 0.95 leading to 0.95 lagging across the full range of continuous rated power output. For all wind-powered and other non-synchronous generation facilities entering the New Service Queue on or after November 1, 2016, the power factor requirement shall be measured at the high-side of the facility substation transformers. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. For all wind-powered and other non-synchronous generation facilities entering the New Service Queue on or after May 1, 2015, and before November 1, 2016, the power factor requirement shall be measured at the generator's terminals. For new generation resources of more than 20 MW, other than wind-powered and other non-synchronous ~~generating facilities~~Generating Facilities, the power factor requirement shall be measured at the generator's terminals. For new generation resources of 20 MW or less, and all wind-powered and other non-synchronous generation facilities entering the New Service Queue prior to May 1, 2015, the power factor requirement shall be measured at the Point of Interconnection. Any different reactive power design criteria that Transmission Provider determines to be appropriate for a wind-powered or other non-synchronous generation facility shall be stated in the Interconnection Service Agreement. A Transmission Interconnection Customer interconnecting Merchant D.C. Transmission Facilities and/ or Controllable A.C. Merchant Transmission Facilities shall design its Customer Facility to maintain a power factor at the Point of Interconnection of at least 0.95 leading and 0.95 lagging, when the Customer Facility is operating at any level within its approved operating range.

4.7.1.1.2 Increases in Generating Capacity or Energy Output:

All increases in the capacity or energy output of any generation facility interconnected with the Transmission System, other than wind-powered and other non-synchronous ~~generating facilities~~Generating Facilities, shall be designed with the ability to maintain a composite power delivery at continuous rated power output at a power factor for all incremental MW of capacity or energy output, of at least 1.0 (unity) to 0.90 lagging. Wind-powered generation facilities and other non-synchronous generation facilities entering the New Service Queue on or after November 1, 2016, shall be designed with the ability to maintain a composite power delivery at a

power factor for all incremental MW of capacity or energy output of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers across the full range of continuous rated power output. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. Wind-powered generation facilities and other non-synchronous generation facilities entering the New Service Queue on or after May 1, 2015, and before November 1, 2016, shall be designed with the ability to maintain a composite power delivery at a power factor for all incremental MW of capacity or energy output, of at least 0.95 leading to 0.95 lagging measured at the generator's terminals under conditions in which a wind-powered generation facility's real power output exceeds 25 percent of its continuous rated power output and, for all other non-synchronous generation facilities, across the full range of continuous rated power output. Wind-powered generation facilities and other non-synchronous generation facilities entering the New Service Queue prior to May 1, 2015 shall be designed with the ability to maintain a composite power delivery at continuous rated power output at a power factor for all incremental MW of capacity of energy output of at least 1.0 (unity) to 0.95 lagging measured at the generator's terminals. The power factor requirement associated with increases in capacity or energy output of more than 20 MW to synchronous generation facilities interconnected with the Transmission System shall be measured at the generator's terminals. The power factor requirement associated with increases in capacity or energy output of 20 MW or less to synchronous generation facilities interconnected to the Transmission System shall be measured at the Point of Interconnection.

4.7.1.2 Obligation to Supply Reactive Power:

Interconnection Customer agrees, as and when so directed by Transmission Provider or when so directed by the Interconnected Transmission Owner acting on behalf or at the direction of Transmission Provider, to operate the Customer Facility to produce reactive power within the design limitations of the Customer Facility pursuant to voltage schedules, reactive power schedules or power factor schedules established by Transmission Provider or, as appropriate, the Interconnected Transmission Owner. Transmission Provider shall maintain oversight over such schedules to ensure that all sources of reactive power in the PJM Region, as applicable, are treated in an equitable and not unduly discriminatory manner. Interconnection Customer agrees that Transmission Provider and the Interconnected Transmission Owner, acting on behalf or at the direction of Transmission Provider, may make changes to the schedules that they respectively establish as necessary to maintain the reliability of the Transmission System.

4.7.1.3 Deviations from Schedules:

In the event that operation of the Customer Facility of an Interconnection Customer causes the Transmission System or the Interconnected Transmission Owner's facilities to deviate from appropriate voltage schedules and/or reactive power schedules as specified by Transmission Provider or the Interconnected Transmission Owner's operations control center (acting on behalf or at the direction of Transmission Provider), or that otherwise is inconsistent with Good Utility Practice and results in an unreasonable deterioration of the quality of electric service to other customers of Transmission Provider or the Interconnected Transmission Owner, the

Interconnection Customer shall, upon discovery of the problem or upon notice from Transmission Provider or the Interconnected Transmission Owner, acting on behalf or at the direction of Transmission Provider, take whatever steps are reasonably necessary to alleviate the situation at its expense, in accord with Good Utility Practice and within the reactive capability of the Customer Facility. In the event that the Interconnection Customer does not alleviate the situation within a reasonable period of time following Transmission Provider's or the Interconnected Transmission Owner's notice thereof, the Interconnected Transmission Owner, with Transmission Provider's approval, upon notice to the Interconnection Customer and at the Interconnection Customer's expense, may take appropriate action, including installation on the Transmission System of power factor correction or other equipment, as is reasonably required, consistent with Good Utility Practice, to remedy the situation cited in Transmission Provider's or the Interconnected Transmission Owner's notice to the Interconnection Customer under this section.

4.7.1.4 Payment for Reactive Power:

Any payments to the Interconnection Customer for reactive power shall be in accordance with Schedule 2 of the Tariff.

4.7.2 Primary Frequency Response:

Section 4.7.2 of this ISA and its subsections apply to New Service Requests received on or after October 1, 2018.

Generation Interconnection Customer shall ensure the primary frequency response capability of its Customer Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Customer Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Generation Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and ±0.036 Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Customer Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Customer Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Customer Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Generation Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of

the Customer Facility has been tested and confirmed during commissioning. Once Generation Interconnection Customer has synchronized the Customer Facility with the Transmission System, Generation Interconnection Customer shall operate the Customer Facility consistent with the provisions specified in sections 4.7.2.1 and 4.7.2.2 of this agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Customer Facilities.

4.7.2.1 Governor or Equivalent Controls:

Whenever the Customer Facility is operated in parallel with the Transmission System, Generation Interconnection Customer shall operate the Customer Facility with its governor or equivalent controls in service and responsive to frequency. Generation Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of ±0.036 Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Generation Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Generation Interconnection Customer needs to operate the Customer Facility with its governor or equivalent controls not in service, Generation Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Generation Interconnection Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Generation Interconnection Customer shall make Reasonable Efforts to keep outages of the Customer Facility's governor or equivalent controls to a minimum whenever the Customer Facility is operated in parallel with the Transmission System.

4.7.2.2 Timely and Sustained Response:

Generation Interconnection Customer shall ensure that the Customer Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Customer Facility has operating capability in the direction needed to correct the frequency deviation. Generation Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Customer Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

4.7.2.3 Exemptions:

Customer Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from sections 4.7.2, 4.7.2.1, and 4.7.2.2 of this agreement. Customer Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in section 4.7.2, but shall be otherwise exempt from the operating requirements in sections 4.7.2, 4.7.2.1, 4.7.2.2, and 4.7.2.4 of this agreement.

4.7.2.4 Energy Storage Resources:

Generation Interconnection Customer interconnecting an Energy Storage Resource shall establish an operating range in Schedule I of this ISA that specifies a minimum state of charge and a maximum state of charge between which the Energy Storage Resource will be required to provide primary frequency response consistent with the conditions set forth in sections 4.7.2, 4.7.2.1, 4.7.2.2, and 4.7.2.3 of this agreement. Schedule I shall specify whether the operating range is static or dynamic, and shall consider (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the Energy Storage Resource; (5) operational limitations of the Energy Storage Resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Generation Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Schedule I must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Generation Interconnection Customer's Energy Storage Resource is required to provide timely and sustained primary frequency response consistent with section 4.7.2.2 of this agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the Energy Storage Resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Generation Interconnection Customer's Energy Storage Resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Generation Interconnection Customer's Energy Storage Resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

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~~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~~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 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~~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~~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.

4.13 Nuclear Generating Facilities:

In the event that the Customer Facility is a nuclear ~~generating facility~~Generating Facility, the Interconnection Parties shall agree to such non-standard terms and conditions as are reasonably necessary to accommodate the Interconnection Customer's satisfaction of Nuclear Regulatory Commission requirements relating to the safety and reliability of operations of such facilities.

5.5 Right to Observe Testing:

Each Interconnected Entity shall notify the other Interconnected Entity in advance of its performance of tests of its portion of the Interconnection Facilities. The other Interconnected Entity shall, at its own expense, have the right, but not the obligation, to:

(a) Observe the other Party's tests and/or inspection of any of its system protection facilities and other protective equipment, including power system stabilizers;

(b) Review the settings of the other Party's system protection facilities and other protective equipment;

(c) Review the other Party's maintenance record relative to the Interconnection Facilities, system protection facilities and other protective equipment; and

(d) Exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party. ~~observe such testing.~~

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 Tariff, Attachment P, Appendix 2, ~~S~~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 Interconnected Transmission Owner's ~~Costs~~ 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) associated with ~~the~~ Interconnection Customer's building Transmission Owner Attachment Facilities~~, Local Upgrades,~~ and Direct Connection 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).~~ Interconnected Transmission Owner oversight costs shall be consistent with Tariff, Attachment P, Appendix 2, section 3.2.3.2(a)(12). 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~~ 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.

13.1A. 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~~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 J

SCHEDULE OF TERMS AND CONDITIONS FOR SURPLUS INTERCONNECTION SERVICE

SCHEDULE K

REQUIREMENTS FOR INTERCONNECTION SERVICE BELOW FULL ELECTRICAL GENERATING CAPABILITY

ATTACHMENT O-1

FORM OF
INTERIM INTERCONNECTION SERVICE AGREEMENT

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

_____
and

_____

(PJM Queue Position #___)

1.0 This Interim Interconnection Service Agreement ("Interim ISA"), including the Specifications attached hereto and incorporated herein, is entered into by and among PJM Interconnection, L.L.C. ("Transmission Provider" or "PJM"), [_____] ("Interconnection Customer" [OPTIONAL: or ["short name"]]), and [_____] ("Interconnected Transmission Owner" [OPTIONAL: or ["short name"]]). [Use as/when applicable: This Interim 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 Attached are Specifications for the Customer Facility that Interconnection Customer proposes to interconnect to the Transmission Provider's Transmission System. Interconnection Customer represents and warrants that, upon completion of their construction, it will own or control the facilities identified in the Specifications attached hereto and made a part hereof. In the event that Interconnection Customer will not own the facilities, Interconnection Customer represents and warrants that it is authorized by the owners of such facilities to enter into this Interim ISA and to represent such control.

3.0 In order to advance the completion of its interconnection under the PJM Open Access Transmission Tariff ("Tariff"), Interconnection Customer has requested an Interim ISA and Transmission Provider has determined that Interconnection Customer is eligible under the Tariff to obtain this Interim ISA.

4.0 (a) In accord with Section 211 of the Tariff, Interconnection Customer, on or before the effective date of this Interim ISA, shall provide 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 Transmission Provider in the amount of $ _____, which amount equals the estimated costs, determined in

accordance with Section 217 of the Tariff, of acquiring, designing, constructing and/or installing the facilities described in section 3.0 of the Attached Specifications. Should Interconnection Customer fail to provide such security in the amount or form required, this Interim ISA shall be terminated. Interconnection Customer acknowledges (1) that it will be responsible for 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, and (2) that the payment security under this section does not include any additional amounts that it will owe in the event that it executes a final Interconnection Service Agreement, as described in section 7.0(a) below.

(b) Interconnection Customer acknowledges (1) that the purpose of this Interim ISA is to expedite, at Interconnection Customer's request, the acquisition, design, construction and/or installation of certain materials and equipment, as described in the Specifications, necessary to interconnect its proposed facilities with Transmission Provider's Transmission System; and (2) that Transmission Provider's Interconnection Studies related to such facilities have not been completed, but that the [identify completed feasibility and/or system impact study(ies)], dated [_____], that included Interconnection Customer's project sufficiently demonstrated, in Interconnection Customer's sole opinion, the necessity of facilities additions to the Transmission System to accommodate Interconnection Customer's project to warrant, in Interconnection Customer's sole judgment, its request that the Interconnected Transmission Owner acquire, design, construct and/or install the equipment indicated in the Specifications for use in interconnecting Interconnection Customer's project with the Transmission System.

5.0 This Interim ISA shall be effective on the date it is executed by all Interconnection Parties and shall terminate upon the execution and delivery by Interconnection Customer and Transmission Provider of the final Interconnection Service Agreement described in section 7.0(a) below, or on such other date as mutually agreed upon by the parties, unless earlier terminated in accordance with the Tariff.

6.0 In addition to the milestones stated in Section 212.5 of the Tariff, during the term of this Interim ISA, Interconnection Customer shall ensure that its generation project meets each of the following development milestones:

[SPECIFY MILESTONES]

OR

[NOT APPLICABLE FOR THIS INTERIM ISA]

OR

[MILESTONE REQUIREMENTS WILL BE SPECIFIED IN THE FURTHER INTERCONNECTION SERVICE AGREEMENT DESCRIBED IN SECTION 7.0(a)]

7.0 (a) Transmission Provider and the Interconnected Transmission Owner agree to provide for the acquisition, design, construction and/or installation of the facilities identified, and to the extent described, in Section 3.0 of the Specifications in accordance with Part IV of the Tariff, as amended from time to time, and this Interim ISA. Except to the extent for which the Specifications provide for interim interconnection rights for the Interconnection Customer, the parties agree that (1) this Interim ISA shall not provide for or authorize Interconnection Service for the Interconnection Customer, and (2) Interconnection Service will commence only after Interconnection Customer has entered into a final Interconnection Service Agreement with Transmission Provider and the Interconnection Transmission Owner (or, alternatively, has exercised its right to initiate dispute resolution or to have the final Interconnection Service Agreement filed with the FERC unexecuted) after completion of the Facilities Study related to Interconnection Customer's Interconnection Request and otherwise in accordance with the Tariff. The final Interconnection Service Agreement may further provide for construction of, and payment for, transmission facilities additional to those identified in the attached Specifications. Should Interconnection Customer fail to enter into such final Interconnection Service Agreement (or, alternatively, to initiate dispute resolution or request that the agreement be filed with the FERC unexecuted) within the time prescribed by the Tariff, Transmission Provider shall have the right, upon providing written notice to Interconnection Customer, to terminate this Interim ISA.

(b) In the event that Interconnection Customer decides not to interconnect its proposed facilities, as described in Section 1.0 of the Specifications to the Transmission System, it shall immediately give Transmission Provider written notice of its determination. Interconnection Customer shall be responsible for the Costs incurred pursuant to this Interim ISA by Transmission Provider and/or by the Interconnected Transmission Owner (1) on or before the date of such notice, and (2) after the date of such notice, if the costs could not reasonably be avoided despite, or were incurred by reason of, Interconnection Customer's determination not to interconnect. Interconnection Customer's liability under the preceding sentence shall include all Cancellation Costs in connection with the acquisition, design, construction and/or installation of the facilities described in section 3.0 of the Specifications. In the event the Interconnected Transmission Owner incurs Cancellation Costs, it shall provide the Transmission Provider, with a copy to the Interconnection Customer, with a written demand for payment and with reasonable documentation of such Cancellation Costs. Within 60 days after the date of Interconnection Customer's notice, 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 (i) Interconnection Customer's cost responsibility under this Interim ISA and the Tariff for Costs, including Cancellation Costs, of the facilities described in section 3.0 of the Specifications and (ii) Interconnection Customer's previous payments under this Interim ISA. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment that the preceding sentence requires it to make unless and until the Interconnected Transmission Owner has returned to it the portion of Interconnection Customer's previous payments that Transmission Provider must pay under that sentence.

This Interim ISA shall be deemed to be terminated upon completion of all payments required under this paragraph (b).

(c) Disposition of the facilities related to this Interim ISA after receipt of Interconnection Customer's notice of its determination not to interconnect shall be decided in accordance with Section 211.1 of the Tariff.

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

9.0 In analyzing and preparing the Facilities Study or the System Impact Study if no Facilities Study is required, and in designing and constructing the Attachment Facilities, Local Upgrades and/or Network Upgrades described in the Specifications attached to this Interim 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 NO FACILITIES STUDY IS REQUIRED OR OF THE ATTACHMENT FACILITIES, LOCAL UPGRADES AND/OR NETWORK UPGRADES, PROVIDED, HOWEVER, that Transmission Provider warrants that the transmission facilities described in Section 3.0 of the Specifications will be designed, constructed 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 Within 120 days after the Interconnected Transmission Owner completes acquisition, design, construction and/or installation of the facilities described in Section 3.0 of the Specifications, Transmission Provider shall provide Interconnection Customer with 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 responsibility under this Interim ISA and the Tariff for the actual cost of such equipment, and (b) Interconnection Customer's previous aggregate payments to Transmission Provider and the Interconnected Transmission Owner hereunder. Notwithstanding the

foregoing, however, Transmission Provider shall not be obligated to make any payment that the preceding sentence requires it to make unless and until the Interconnected Transmission Owner has returned to it the portion of Interconnection Customer's previous payments that Transmission Provider must pay under that sentence.

11.0 No third party beneficiary rights are created under this Interim ISA, provided, however, that payment obligations imposed on Interconnection Customer hereunder are agreed and acknowledged to be for the benefit of the Interconnected Transmission Owner actually performing the services associated with the interconnection of the ~~generating facilities~~Generating Facilities and any associated upgrades of other facilities.

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

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

14.0 This Interim ISA shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.

15.0 This Interim ISA shall not be construed as an application for service under Part II or Part III of the Tariff.

16.0 Any notice or request made to or by either Party regarding this Interim ISA 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

[CONTACT NAME/ADDRESS]

Interconnected Transmission Owner

[CONTACT NAME/ADDRESS]

17.0 All portions of the Tariff and the Operating Agreement pertinent to the subject of this Interim ISA are incorporated herein and made a part hereof.

18.0 This Interim ISA is entered into pursuant to Part IV of the Tariff.

19.0 Neither party shall be liable for consequential, incidental, special, punitive, exemplary or indirect damages, lost profits or other business interruption damages, by statute, in tort or contract, under any indemnity provision or otherwise with respect to any claim, controversy or dispute arising under this Interim ISA.

20.0 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 20.1, Schedule A to this Interim ISA shall set forth the Interconnection Customer's agreement to conform with the IRS safe harbor provisions for non-taxable status.

20.1 Tax Liability

20.1.1 Safe Harbor Provisions:

This Section 20.1.1 is applicable only to Generation Interconnection Customers. Provided that Interconnection Customer agrees to conform to all requirements of the Internal Revenue Service ("IRS") (e.g., the "safe harbor" provisions of IRS Notices 2001-82 and 88-129) that would confer nontaxable status on some or all of the transfer of property, including money, by Interconnection Customer to the Interconnected Transmission Owner for payment of the Costs of construction of the Transmission Owner Interconnection Facilities, the Interconnected Transmission Owner, based on such agreement and on current law, shall treat such transfer of property to it as nontaxable income and, except as provided in Section 20.1.2 below, shall not include income taxes in the Costs of Transmission Owner Interconnection Facilities that are payable by Interconnection Customer under the Interim Interconnection Service Agreement, the Interconnection Service Agreement or the Interconnection Construction Service Agreement. Interconnection Customer shall document its agreement to conform to IRS requirements for such non-taxable status in the Interconnection Service Agreement, the Interconnection Construction Service Agreement, and/or the Interim Interconnection Service Agreement.

20.1.2 Tax Indemnity:

Interconnection Customer shall indemnify the Interconnected Transmission Owner for any costs that Interconnected Transmission Owner incurs in the event that the IRS and/or a state department of revenue (State) determines that the property, including money, transferred by Interconnection Customer to the Interconnected Transmission Owner with respect to the construction of the Transmission Owner Interconnection Facilities is taxable income to the Interconnected Transmission Owner. Interconnection Customer shall pay to the Interconnected Transmission Owner, on demand, the amount of any income taxes that the IRS or a State assesses to the Interconnected Transmission Owner in connection with such transfer of property and/or money, plus any applicable interest and/or penalty charged to the Interconnected Transmission Owner. In the event that the Interconnected Transmission Owner chooses to contest such assessment, either at the request of Interconnection Customer or on its own behalf, and prevails in reducing or eliminating the tax, interest and/or penalty assessed against it, the Interconnected

Transmission Owner shall refund to Interconnection Customer the excess of its demand payment made to the Interconnected Transmission Owner over the amount of the tax, interest and penalty for which the Interconnected Transmission Owner is finally determined to be liable. Interconnection Customer's tax indemnification obligation under this section shall survive any termination of the Interim Interconnection Service Agreement or Interconnection Construction Service Agreement.

20.1.3 Taxes Other Than Income Taxes:

Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, the Interconnected Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the Interconnected Transmission Owner for which Interconnection Customer may be required to reimburse Transmission Provider under the terms of this Interim Interconnection Service Agreement or Part VI of the Tariff. Interconnection Customer shall pay to the Interconnected Transmission Owner on a periodic basis, as invoiced by the Interconnected Transmission Owner, the Interconnected Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Interconnection Customer and the Interconnected Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Interconnection Customer to the Interconnected Transmission Owner for such contested taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Interconnected Transmission Owner.

20.1.4 Income Tax Gross-Up

20.1.4.1 Additional Security:

In the event that Interconnection Customer does not provide the safe harbor documentation required under Section 20.1.1 prior to execution of this Interim Interconnection Service Agreement, within 15 days after such execution, Transmission Provider shall notify Interconnection Customer in writing of the amount of additional Security that Interconnection Customer must provide. The amount of Security that a Transmission Interconnection Customer must provide initially pursuant to this Interim Interconnection Service Agreement shall include any amounts described as additional Security under this Section 20.1.4 regarding income tax gross-up.

20.1.4.2 Amount:

The required additional Security shall be in an amount equal to the amount necessary to gross up fully for currently applicable federal and state income taxes the estimated Costs of Local Upgrades and Network Upgrades for which Interconnection Customer previously provided Security. Accordingly, the additional Security shall equal the amount necessary to increase the

total Security provided to the amount that would be sufficient to permit the Interconnected Transmission Owner to receive and retain, after the payment of all applicable income taxes ("Current Taxes") and taking into account the present value of future tax deductions for depreciation that would be available as a result of the anticipated payments or property transfers (the "Present Value Depreciation Amount"), an amount equal to the estimated Costs of Local Upgrades and Network Upgrades for which Interconnection Customer is responsible under the Interconnection Service Agreement. For this purpose, Current Taxes shall be computed based on the composite federal and state income tax rates applicable to the Interconnected Transmission Owner at the time the additional Security is received, determined using the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting the Interconnected Transmission Owner's anticipated tax depreciation deductions associated with such payments or property transfers by its current weighted average cost of capital.

20.1.4.3 Time for Payment:

Interconnection Customer must provide the additional Security, in a form and with terms as required by Sections 212.4 of the Tariff, within 15 days after its receipt of Transmission Provider's notice under this section. The requirement for additional Security under this section shall be treated as a milestone included in the Interconnection Service Agreement pursuant to Section 212.5 of the Tariff.

20.1.5 Tax Status:

Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Interim Interconnection Service Agreement or the Tariff is intended to adversely affect any Interconnected Transmission Owner's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

21.0 Addendum of Interconnection Requirement for all Wind or Non-synchronous Generation Facilities. To the extent required, Schedule B to this Interim ISA sets forth interconnection requirements for all wind or non-synchronous generation facilities and is hereby incorporated by reference and made a part of this Interim ISA.

22.0 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.

IN WITNESS WHEREOF, Transmission Provider, Interconnection Customer and Interconnected Transmission Owner have caused this Interim 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
INTERIM INTERCONNECTION SERVICE AGREEMENT
By and Among
PJM INTERCONNECTION, L.L.C.
And

_____

And

_____

(PJM Queue Position #___)

1.0 Description of 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~~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 Interim Interconnection Service Agreement.}

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

Nominal Rated Capability: _____MW}

2.0 Interconnection Rights: Interconnection Customer shall obtain Capacity Interconnection Rights in accordance with Subpart C of Part VI of the Tariff at the location specified in section 1.0b upon its execution of the final Interconnection Service Agreement described in section 7.0(a) of this Interim ISA. [**if applicable, add:** , provided, however, that pending execution of the final Interconnection Service Agreement, Interconnection Customer shall be entitled to the following interim rights:

Pursuant to and subject to the applicable terms of the Tariff, Interconnection Customer shall have Capacity Interconnection Rights as a Capacity Resource at the Point of Interconnection specified in this Interim ISA in the amount of __ MW, for the time period of _____ to _____. To the extent that the Customer Facility described in section 1.0 is not a Capacity Resource with Capacity Interconnection Rights, such Customer Facility shall be an Energy Resource. Pursuant to this Interim ISA, the Customer Facility 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.]

3.0.A Facilities to be acquired, designed, constructed and/or installed by the Interconnected Transmission Owner under this Interim ISA:

3.0.B Facilities to be acquired, designed, constructed and/or installed by the Interconnection Customer under this Interim ISA:

4.0 Interconnection Customer shall be subject to the charges detailed below:

4.1 Attachment Facilities Charge:

4.2 Local Upgrades Charge:

4.3 Network Upgrades Charge:

4.4 Cost Breakdown:

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

$ Total

SCHEDULES: {Note: Schedules A and B are required, others are optional; add if applicable and desirable for clarity.}

SCHEDULE A – INTERCONNECTION CUSTOMER'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS

SCHEDULE B - INTERCONNECTION REQUIREMENTS FOR A WIND GENERATION FACILITY

SCHEDULE __ - CUSTOMER FACILITY LOCATION/SITE PLAN

SCHEDULE __ - SINGLE-LINE DIAGRAM

SCHEDULE A

INTERCONNECTION CUSTOMER'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS

{Include the appropriate language from the alternatives below:}

{Include the following language if not required:}
Not Required.

[OR]

{Include the following language if applicable to Interconnection Customer:}

As provided in Section 20.1 of this Interim ISA and subject to the requirements thereof, Interconnection Customer represents that it meets all qualifications and requirements as set forth in Section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016) (the "IRS Notice"). Interconnection Customer agrees to conform with all requirements of the safe harbor provisions specified in the IRS Notice, as they may be amended, as required to confer non-taxable status on some or all of the transfer of property, including money, by Interconnection Customer to Interconnected Transmission Owner with respect to the payment of the Costs of construction and installation of the Transmission Owner Interconnection Facilities specified in this Interim ISA.

Nothing in Interconnection Customer's agreement pursuant to this Schedule A shall change Interconnection Customer's indemnification obligations under Section 20.1 of this Interim ISA.

{Include the following Schedule B, as applicable, for New Service Requests received before May 1, 2015}

SCHEDULE B

INTERCONNECTION REQUIREMENTS FOR A

WIND GENERATION FACILITY

{Include the appropriate language from the alternatives below}

{Include the following language if the Customer Facility is not a wind generation facility}

Not Required

[OR]

{Include the following language when the Customer Facility is a wind generation facility}

Schedule B sets forth requirements and provisions specific to the interconnection of a wind generation facility that is greater than 20 MW. All other requirements pertaining to the interconnection of generation facilities above 20 MW set forth in Part IV of the Tariff continue to apply to wind generation facility interconnections.

A. Technical Standards Applicable to a Wind Generation Facility

i. Low Voltage Ride-Through (LVRT) Capability

A wind generation facility shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The Schedule B LVRT standard provides for a transition period standard and a post-transition period standard.

Transition Period LVRT Standard

The transition period standard applies to wind generation facilities subject to Commission Order No. 661 that have either: (i) Interconnection Service Agreements signed and filed with the Commission, filed with the Commission in unexecuted form, or filed with the Commission as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generation turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

1. Wind generation facilities are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage

unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generation facility substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generation facility shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generation facility step-up transformer (i.e. the transformer that steps the voltage up to the transmission interconnection voltage or "GSU"), after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generation facility may disconnect from the transmission system.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.

3. Wind generation facilities may be tripped after the fault period if this action is intended as part of a special protection system.

4. Wind generation facilities may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator, etc.) within the wind generation facility or by a combination of generator performance and additional equipment.

5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the initial effective date of the Schedule B LVRT standard are exempt from meeting the Schedule B LVRT standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Schedule B LVRT standard.

Post-transition Period LVRT Standard

All wind generation facilities subject to Commission Order No. 661 and not covered by the transition period described above must meet the following requirements:

1. Wind generation facilities are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generation facility substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generation facility shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generation facility may disconnect from the transmission system. A wind generation facility shall remain interconnected during such a fault on the transmission system for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.

3. Wind generation facilities may be tripped after the fault period if this action is intended as part of a special protection system.

4. Wind generation facilities may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator) within the wind generation facility or by a combination of generator performance and additional equipment.

5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the initial effective date of the Schedule B LVRT standard are exempt from meeting the Schedule B LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Schedule B LVRT Standard.

ii. Power Factor Design Criteria (Reactive Power)

The power factor requirements for wind generation facilities set forth in section 4.7.1 of Appendix 2 to Attachment O of the Tariff can be met by using, for example, power electronic devices designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors if agreed to by the Transmission Provider, or a combination of the two. The Interconnection Customer shall not disable power factor equipment while the wind generation facility is in operation. Wind generation facilities shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the System Impact Study shows this to be required for system safety or reliability.

iii. Supervisory Control and Data Acquisition (SCADA) Capability

The wind generation facility shall provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability. The Transmission Provider and the wind generation facility Interconnection Customer shall determine what SCADA information is essential for the proposed wind generation facility, taking into account the size of the facility and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

iv. Meteorological Data Reporting Requirement

The wind generation facility shall, at a minimum, be required to provide the Transmission Provider with site-specific meteorological data including:

- Temperature (degrees Fahrenheit)
- Wind speed (meters/second)
- Wind direction (degrees from True North)

- Atmospheric pressure (hectopascals)
- Forced outage data (wind turbine and MW unavailability)

The Transmission Provider and Interconnection Customer may mutually agree to any additional meteorological data that are required for the development and deployment of a power production forecast. All requirements for meteorological and forced outage data must be commensurate with the power production forecasting employed by the Transmission Provider. Such additional mutually agreed upon requirements for meteorological and forced outage data are set forth below:

[SPECIFICY AGREED UPON METEOROLOGICAL AND FORCED OUTAGE DATA REQUIREMENTS]

OR

[NOT APPLICABLE FOR THIS INTERIM ISA]

{Include the following Schedule B, as applicable, for New Service Requests received on or after May 1, 2015}

SCHEDULE B

INTERCONNECTION REQUIREMENTS FOR ALL WIND AND NON-SYNCHRONOUS GENERATION FACILITIES

{Include the appropriate language from the alternatives below}

{Include the following language if the Customer Facility is not a wind or non-synchronous generation facility}

Not Required

[OR]

{Include the following language when the Customer Facility is a wind or non-synchronous generation facility}

A. Voltage Ride Through Requirements

The Customer Facility shall be designed to remain in service (not trip) for voltages and times as specified for the Eastern Interconnection in Attachment 1 of NERC Reliability Standard PRC-024-1, and successor Reliability Standards, for both high and low voltage conditions, irrespective of generator size, subject to the permissive trip exceptions established in PRC-024-1 (and successor Reliability Standards).

B. Frequency Ride Through Requirements

The Customer Facility shall be designed to remain in service (not trip) for frequencies and times as specified in Attachment 2 of NERC Reliability Standard PRC-024-1, and successor Reliability Standards, for both high and low frequency condition, irrespective of generator size, subject to the permissive trip exceptions established in PRC-024-1 (and successor Reliability Standards).

C. Supervisory Control and Data Acquisition (SCADA) Capability

The wind or non-synchronous generation facility shall provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability. The Transmission Provider and the wind or non-synchronous generation facility Interconnection Customer shall determine what SCADA information is essential for the proposed wind or non-synchronous generation facility, taking into account the size of the facility and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

D. Meteorological Data Reporting Requirement (Applicable to wind generation facilities only)

The wind generation facility shall, at a minimum, be required to provide the Transmission Provider with site-specific meteorological data including:

- Temperature (degrees Fahrenheit)
- Wind speed (meters/second)
- Wind direction (degrees from True North)
- Atmosphere pressure (hectopascals)
- Forced outage data (wind turbine and MW unavailability)

The Transmission Provider and Interconnection Customer may mutually agree to any additional meteorological data that are required for the development and deployment of a power production forecast. All requirements for meteorological and forced outage data must be commensurate with the power production forecasting employed by the Transmission Provider. Such additional mutually agreed upon requirements for meteorological and forced outage data are set forth below:

[SPECIFY AGREED UPON METEOROLOGICAL AND FORCED OUTAGE DATA REQUIREMENTS]

[OR]

[NOT APPLICABLE FOR THIS INTERIM ISA]

3.2 Construction by Interconnected Transmission Owner

3.2.1 Standard Option:

The Interconnected Transmission Owner shall use Reasonable Efforts to design, procure, construct and install the Transmission Owner Interconnection Facilities that it is responsible for constructing in accordance with the Schedule of Work.

3.2.1.1 Construction Sequencing:

In general, the sequence of the proposed dates of Initial Operation of Interconnection Customers seeking interconnection to the Transmission System will determine the sequence of construction of Network Upgrades.

3.2.2 Negotiated Contract Option:

As an alternative to the Standard Option set forth in Section 3.2.1 of this Appendix 2, the Interconnected Transmission Owner and the Interconnection Customer may mutually agree to a Negotiated Contract Option for the Interconnected Transmission Owner's design, procurement, construction and installation of the Transmission Owner Interconnection Facilities. Under the Negotiated Contract Option, the Interconnection Customer and the Interconnected Transmission Owner may agree to terms different from those included in the Standard Option of Section 3.2.1 above and the corresponding standard terms set forth in the applicable provisions of Part VI of the Tariff and this Appendix 2. Under the Negotiated Contract Option, negotiated terms may include the work schedule applicable to the Interconnected Transmission Owner's construction activities and changes to same (Section 3.3 of this Appendix 2); payment provisions, including the schedule of payments; incentives, penalties and/or liquidated damages related to timely completion of construction (Section 3.2.1 of this Appendix 2); use of third party contractors; and responsibility for Costs, but only as between the Interconnection Customer and the Interconnected Transmission Owner that are parties to this Interconnection Construction Service Agreement; no other Interconnection Customer's responsibility for Costs may be affected (Section 217 of the Tariff). No other terms of the Tariff or this Appendix 2 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 Interconnection Construction Service Agreement.

3.2.3 Option to Build

3.2.3.1 Option:

~~In the event that the Interconnected Transmission Owner and the Interconnection Customer are unable to agree upon the terms of an Interconnection Construction Service Agreement (a) on or before the date that is 30 days after Interconnection Customer's execution of the Interconnection~~

~~Service Agreement, or (b) by such earlier date as is reasonable in the light of the schedule for construction of, as the case may be, the Transmission Owner Interconnection Facilities, as set forth in the Facilities Study, and subject to the terms and conditions set forth in Sections 2 and 3 of this Appendix 2, or if mutually agreed by and between the Interconnection Customer and the Transmission Owner, the~~ Interconnection Customer shall have the ~~right~~option, ~~but not the obligation~~ ("Option to Build")~~,~~ to assume responsibility for the design, procurement, and construction ~~and install all or any portion~~ of ~~the~~ Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades on the dates specified in Schedule J (Schedule of Work) of this Agreement. Transmission Provider and Interconnection Customer must agree as to what constitutes Direct Connection Network Upgrades and identify such Direct Connection Network Upgrades in Schedule D (Option to Build) of this Agreement. If the Transmission Provider and Interconnection Customer disagree about whether a particular Network Upgrade is a Direct Connection Network Upgrade, the Transmission Provider must provide the Interconnection Customer with a written technical explanation outlining why the Transmission Provider does not consider the Network Upgrade to be a Direct Connection Network Upgrade within fifteen (15) days of its determination. Except for Direct Connection Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option. In order to exercise this Option to Build, ~~the~~ Interconnection Customer must provide Transmission Provider and the Interconnected Transmission Owner with written notice of ~~its~~ Interconnection Customer's election to exercise the option ~~by~~ no later than ~~seven days after the date that is~~ thirty (30) days ~~after~~ from the date the Interconnection Customer receives the results of the Facilities Study (or, if no Facilities Study was required, completion of the System Impact Study). Interconnection Customer may not elect Option to Build after such date.

~~'s execution of the Interconnection Service Agreement, specifying either that a mutual agreement has been reached between the Interconnection Customer and the Interconnected Transmission Owner that the Interconnection Customer will exercise the Option to Build, or the specific terms and conditions of the Interconnection Construction Service Agreement upon which the Interconnected Transmission Owner and the Interconnection Customer are unable to agree and the efforts undertaken by the Interconnection Customer to resolve such disagreement; provided, however, that the Interconnection Customer and the Interconnected Transmission Owner may by mutual agreement extend the time period for exercise of the option.~~

3.2.3.2 General Conditions Applicable to Option:

In addition to the other terms and conditions applicable to the construction of facilities under this Appendix 2, the Option to Build is subject to the following conditions:

(a) If the Interconnection Customer assumes responsibility for the design, procurement and construction of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades:

(i) Interconnection Customer shall engineer, procure equipment, and construct Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades (or portions thereof) using Good

Utility Practice and using standards and specifications provided in advance by Transmission Owner;

(ii) Interconnection Customer's engineering, procurement and construction of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades shall comply with all requirements of law to which Interconnected Transmission Owner shall be subject in the engineering, procurement or construction of Interconnected Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades;

(iii) Interconnected Transmission Owner shall review and approve engineering design, equipment acceptance tests, and the construction of Interconnected Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades;

(iv) Prior to commencement of construction, Interconnection Customer shall provide to Interconnected Transmission Owner a schedule for construction of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades and shall promptly respond to requests for information from Transmission Owner;

(v) At any time during construction, Interconnected Transmission Owner shall have the right to gain unrestricted access to Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades and to conduct inspections of the same;

(vi) At any time during construction, should any phase of the engineering, equipment procurement, or construction of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades not meet the standards and specifications provided by Interconnection Transmission Owner, Interconnection Customer shall be obligated to remedy deficiencies in that portion of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades;

*(*vii~~e~~*) Interconnection Customer shall indemnify Interconnected Transmission Owner and Transmission Provider for claims arising from Interconnection Customer's construction of Transmission Owner Interconnection Facilities* that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades *under the terms and procedures applicable to Sections 12.1, 12.2, 12.3, and 12.4 of this Appendix 2.*

(viii) Interconnection Customer shall transfer control of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades to Interconnected Transmission Owner;

(ix) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Transmission Owner Attachment Facilities that are Transmission Owner

Attachment Facilities and Direct Connection Network Upgrades to Interconnected Transmission Owner;

(x) Interconnected Transmission Owner shall approve and accept for operation and maintenance Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades to the extent engineered, procured, and constructed in accordance with this ICSA, Appendix 2, section 3.2.3.2;

(xi) Interconnection Customer shall deliver to Transmission Owner "as-built" drawings, information, and any other documents that are reasonably required by Transmission Provider to assure that the Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades are built to the standards and specifications required by Transmission Provider; and

(xii) If Interconnection Customer exercises the Option to Build pursuant to section 3.2.3.1, Interconnection Customer shall pay Interconnected Transmission Owner the agreed upon amount of [$] for Interconnected Transmission Owner to execute the responsibilities enumerated to Interconnected Transmission Owner under section 3.2.3.2. Interconnected Transmission Owner shall invoice Interconnection Customer for this total amount to be divided on a monthly basis pursuant to Interconnection Service Agreement, Tariff, Attachment O, Appendix 2, section 11.2.2.

(b) In addition to the General Conditions applicable to Option to Build set forth in section 3.2.3.2(a) above, the following conditions also apply:

(i~~a~~) The Interconnection Customer must obtain or arrange to obtain all necessary permits and authorizations for the construction and installation of the Transmission Owner Interconnection Facilities that it is building, provided, however, that when the Interconnected Transmission Owner's assistance is required, the Interconnected Transmission Owner shall assist the Interconnection Customer in obtaining such necessary permits or authorizations with efforts similar in nature and extent to those that the Interconnected Transmission Owner typically undertakes in acquiring permits and authorizations for construction of facilities on its own behalf;

(ii~~b~~) The Interconnection Customer must obtain all necessary land rights for the construction and installation of the Transmission Owner Interconnection Facilities that it is building, provided, however, that upon Interconnection Customer's reasonable request, the Interconnected Transmission Owner shall assist the Interconnection Customer in acquiring such land rights with efforts similar in nature and extent to those that the Interconnected Transmission Owner typically undertakes in acquiring land rights for construction of facilities on its own behalf;

(iii~~c~~) Notwithstanding anything stated herein, each Interconnected 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

Interconnected Transmission Owner's existing facilities of any Transmission Owner Interconnection Facilities that the Interconnection Customer builds; and

(ivd) The Transmission Owner Interconnection Facilities built by the Interconnection Customer shall be successfully inspected, tested and energized pursuant to Sections 3.8 and 3.9 of this Appendix 2.

~~*(e) Interconnection Customer shall indemnify Interconnected Transmission Owner and Transmission Provider for claims arising from Interconnection Customer's construction of Transmission Owner Interconnection Facilities under the terms and procedures applicable to Sections 12.1, 12.2, 12.3, and 12.4 of this Appendix 2.*~~

3.2.3.3 Additional Conditions Regarding Network Facilities:

To the extent that the Interconnection Customer utilizes the Option to Build for design, procurement, construction and/or installation of (a) any Transmission Owner Interconnection Facilities that are ~~Local Upgrades or~~Direct Connection Network Upgrades to Transmission System facilities that are in existence or under construction by or on behalf of the Interconnected Transmission Owner on the date that the Interconnection Customer solicits bids under Section 3.2.3.7 below, or (b) Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades that are to be located on land or in right-of-way owned or controlled by the Interconnected 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 2, all work shall comply with the following further conditions:

(i) All work performed by or on behalf of the Interconnection Customer shall be conducted by contractors, and using equipment manufacturers or vendors, that are listed on the Interconnected Transmission Owner's List of Approved Contractors;

(ii) The Interconnected 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 Interconnection Facilities built by or for the Interconnection Customer; and for acceptance testing of any equipment that will be owned and/or operated by the Interconnected Transmission Owner;

(iii) The Interconnected 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 Transmission Owner ~~Interconnection~~ Attachment Facilities and Direct Connection Network 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 Interconnected Transmission Owner or any portion of the Transmission System, provided that, unless circumstances do not reasonably permit such consultations, the Interconnected Transmission Owner shall consult with the Interconnection

Customer and with Transmission Provider before directing that work be stopped or ordering any corrective measures;

(iv) The Interconnection Customer and its contractors, employees and agents shall comply with the Interconnected 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 Interconnected Transmission Owner, provided that the Interconnected 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 Interconnection Customer within 20 Business Days after a request therefor made by Interconnection Customer following its receipt of the Facilities Study;

(v) The Interconnection 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 Interconnection 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.

3.2.3.4 Administration of Conditions:

To the extent that the Interconnected Transmission Owner exercises any discretion in the application of any of the conditions stated in Sections 3.2.3.2 and 3.2.3.3 of this Appendix 2, 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 Interconnection Customer may require for the purpose of complying with any of those conditions.

3.2.3.5 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 an Interconnection Customer, a Transmission Owner shall add to its List of Approved Contractors (1) any design or construction contractor regarding which the Interconnection 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 Interconnection 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.

3.2.3.6 Construction by Multiple Interconnection Customers:

In the event that there are multiple Interconnection Customers that wish to exercise an Option to Build with respect to Interconnection Facilities of the types described in Section 3.2.3.3 to this Appendix 2, the Transmission Provider shall determine how to allocate the construction responsibility among them unless they reach agreement among themselves on how to proceed.

3.2.3.7 Option Procedures:

(a) Within 10 days after notifying Transmission Provider and the Interconnected Transmission Owner of its election to exercise the Option to Build, Interconnection Customer shall solicit bids from one or more Approved Contractors named on the Interconnected Transmission Owner's List of Approved Contractors to procure equipment for, and/or to design, construct and/or install, the Transmission Owner Interconnection Facilities that the Interconnection Customer seeks to build under the Option to Build on terms (i) that will meet the Interconnection Customer's proposed schedule; (ii) that, if the Interconnection Customer seeks to have an Approved Contractor construct or install Transmission Owner ~~Interconnection~~ Attachment Facilities and Direct Connection Network Upgrades, will satisfy all of the conditions on construction specified in Sections 3.2.3.2 and 3.2.3.3 of this Appendix 2; and (iii) that will satisfy the obligations of a Constructing Entity (other than those relating to responsibility for the costs of facilities) under this Appendix 2.

(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 Interconnection Customer.

(c) Upon receipt of a qualifying bid acceptable to it, the Interconnection 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 Interconnection Customer in response to its solicitation, the Interconnected Transmission Owner(s) shall be responsible for the design, procurement, construction and installation of the Transmission Owner Interconnection Facilities in accordance with the Standard Option described in Section 3.2.1 of this Appendix 2.

3.2.3.8 Interconnection Customer Drawings:

Interconnection Customer shall submit to the Interconnected Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Transmission Owner Interconnection Facilities s that Interconnection Customer arranges to build under ~~the~~ this Option to Build. *The Interconnected Transmission Owner shall review and approve the initial drawings and engineering design of the Transmission Owner Interconnection Facilities to be constructed under the Option to Build.* The Interconnected Transmission Owner shall review the drawings to assess the consistency of Interconnection Customer's design of the pertinent Transmission Owner Interconnection Facilities with Applicable Standards and the Facilities Study. Interconnected Transmission Owner, with facilitation and oversight by Transmission Provider, shall provide comments on such drawings to Interconnection 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.

3.2.3.9 Effect of Review:

Interconnected Transmission Owner's review of Interconnection Customer's initial drawings of the Transmission Owner Interconnection Facilities that the Interconnection 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, Interconnection Customer shall make such changes to the design of the pertinent Transmission Owner Interconnection Facilities as may reasonably be required by Transmission Provider, in consultation with the Interconnected Transmission Owner, to ensure that the Transmission Owner Interconnection Facilities that Interconnection Customer is building meet Applicable Standards and conform with the Facilities Study.

9.2 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 this 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 this Appendix 2, ~~for the~~ Interconnected Transmission Owner's ~~Costs~~ oversight costs (i.e. costs incurred by the Interconnected Transmission Owner when engaging in oversight activities to satisfy itself that the Interconnection Customer is complying with the Interconnected Transmission Owner's standards and specifications for the construction of facilities) associated with the Interconnection Customer's building Transmission Owner Attachment Facilities~~, Local Upgrades~~ and Direct Connection 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. Interconnected Transmission Owner's oversight costs shall be consistent with Tariff, Attachment P, Appendix 2, section 3.2.3.2(a)(12).~~Provided, however, such Interconnected Transmission Owner Costs may include oversight costs (i.e. costs incurred by the Interconnected Transmission Owner when engaging in oversight activities to satisfy itself that the Interconnection Customer is complying with the Interconnected Transmission Owner's standards and specifications for the construction of facilities) only if the Interconnected 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 this Appendix.~~ 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 9.3 of this Appendix 2 shall govern the timing of the final cost reconciliation upon completion of the work.

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~~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.

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~~option~~, 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 that are Direct Connection Network Upgrades on the dates specified in Appendix I of this Agreement. Transmission Provider and New Service Customer must agree as to what constitutes Direct Connection Network Upgrades in Schedule C of this Agreement. If the Transmission Provider and New Service Customer disagree about whether a particular Network Upgrade is a Direct Connection Network Upgrade, the Transmission Provider must provide the New Service

Customer a written technical explanation outlining why the Transmission Provider does not consider the Network Upgrade to be a Direct Connection Network Upgrade within fifteen (15) days of its determination. - Transmission Provider and New Service Customer must agree as to what constitutes Direct Connection Network Upgrades and identify such Direct Connection Network Upgrades in Schedule C (Option to Build) of this Agreement. Except for Direct Connection Network Upgrades, New Service Customer shall have no right to construct Network Upgrades under this option. 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 no later than thirty (30) days from the date the New Service Customer receives the results of the Facility Study (or, if no Facilities Study was required completion of the System Impact Study). New Service Customer may not elect Option to Build after such date. New Service Customer shall ~~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) If New Service Customer assumes responsibility for the design, procurement and construction of Direct Assignment Facilities and Customer-Funded Upgrades that are Direct Connection Network Upgrades:

(i) New Service Customer shall engineer, procure equipment, and construct Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by Interconnected Transmission Owner;

(ii) New Service Customer's engineering, procurement and construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades shall comply with all requirements of law to which Interconnected Transmission Owner shall be subject in the engineering, procurement or construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades;

(iii) Interconnected Transmission Owner shall review and approve engineering design, equipment acceptance tests, and the construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades;

(iv) Prior to commencement of construction, New Service Customer shall provide to Interconnected Transmission Owner a schedule for construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades and shall promptly respond to requests for information from Interconnected Transmission Owner;

(v) At any time during construction, Interconnected Transmission Owner shall have the right to gain unrestricted access to Direct Assignment Facilities and Customer-Funded Upgrades that are Direct Connection Network Upgrades and to conduct inspections of the same;

(vi) At any time during construction, should any phase of the engineering, equipment procurement, or construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades not meet the standards and specifications provided by Interconnected Transmission Owner, New Service Customer shall be obligated to remedy deficiencies in that portion of Direct Assignment Facilities and Customer-Funded Upgrades that are Direct Connection Network Upgrades;

(vii) New Service Customer shall indemnify Interconnected Transmission Owner and Transmission Provider for claims arising from New Service Customer's construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades under the terms and procedures applicable to this Appendix III, sections 12.1, 12.2, 12.3, and 12.4;

(viii) New Service Customer shall transfer control of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades to Interconnected Transmission Owner;

(ix) Unless Parties otherwise agree, New Service Customer shall transfer ownership of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades to Interconnected Transmission Owner;

(x) Interconnected Transmission Owner shall approve and accept for operation and maintenance Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades to the extent engineered, procured, and constructed in accordance with this ICSA, Appendix 2, section 3.2.3.2;

(xi) New Service Customer shall deliver to Transmission Owner "as-built" drawings, information, and any other documents that are reasonably required by Transmission Provider to assure that the Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades are built to the standards and specifications required by Interconnected Transmission Owner; and

(xii) If New Service Customer exercises the Option to Build pursuant to section 6.2.1, New Service Customer shall pay Interconnected Transmission Owner the agreed upon amount of [$] for Interconnected Transmission Owner to execute the responsibilities enumerated to Interconnected Transmission Owner under section 6.2.2. Interconnected Transmission Owner shall invoice New Service Customer for this total amount to be divided on a monthly basis pursuant to Appendix III, section 9.3.

(b~~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 are Direct Connection Network 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;

(cb) 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 are Direct Connection Network 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;

(dc) 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 are Direct Connection Network Upgrades that the New Service Customer builds; and

(ed) The Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network 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~~ Direct Connection 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 Direct Connection Network Upgrades 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 that are Direct Connection Network 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 that are Direct Connection Network 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 Interconnected 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 Interconnected 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 Interconnected 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.

Interconnected 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.

7.0 Suspension of Work Upon Default.

Upon the occurrence of a Default by New Service Customer, the Transmission Provider or the Transmission Owner may, by written notice to New Service Customer, suspend further work associated with the Direct Assignment Facilities and/or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, Transmission Owner is responsible for constructing. Such suspension shall not constitute a waiver of any termination rights under this Section 7.0. In the event of a suspension by Transmission Provider or Transmission Owner, the New Service Customer shall be responsible for the Costs incurred in connection with any suspension hereunder.

7.1 Notification and Correction of Defects

7.1.1 In the event that inspection and/or testing of any Direct Assignment Facilities or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, built by Transmission Owner identifies any defects or failures to comply with Applicable Standards in such Direct Assignment Facilities or Customer-Funded Upgrades, then Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. If such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion. Such acceptance does not modify and shall not limit the Interconnection Customer's indemnification obligations set forth in Tariff, Attachment P, Appendix 2, section 3.2.3(e).

9.0 Security, Billing And Payments

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

9.1 Recurring Charges Pursuant to Section 26:

The following provisions shall apply with respect to recurring charges applicable to a Merchant Network Upgrade pursuant to Section 26 of this Appendix III.

9.1.1 General:

Except as, and to the extent, otherwise provided in this Upgrade CSA, billing and payment of any recurring charges applicable to the Merchant Network Upgrade pursuant to Section 26 of this Appendix III shall be in accordance with Section 7 of the Tariff. Transmission Owner shall provide Transmission Provider with all necessary information and supporting data that Transmission Provider may reasonably require to administer billing for and payment of applicable charges under this Appendix III. Transmission Provider shall remit to Transmission Owner revenues received in payment of Transmission Owner's charges to Interconnection Customer under this Appendix III upon Transmission Provider's receipt of such revenues. At Transmission Provider's reasonable discretion, charges to Interconnection Customer and remittances to Transmission Owner under this Appendix III may be netted against amounts owed by or to such parties under the Tariff.

9.2 Adjustments to Security.

The Security provided by New Service Customer at or before the Effective Date of this Upgrade CSA shall be: (a) reduced as portions of the work on Direct Assignment Facilities or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, are completed; and/or (b) increased or decreased as required to reflect adjustments to New Service Customer's cost responsibility, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals.

9.3 Invoice.

Interconnected Transmission Owner shall provide Transmission Provider a quarterly statement of its 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 Direct Assignment Facilities and/or Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA, or (b) in the event that the New Service Customer exercises the Option to Build pursuant to Section 6.2.1 of this Appendix III, for the Interconnected Transmission Owner's ~~Costs~~ 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) associated with the New Service Customer's building Direct Assignment Facilities~~, Local Upgrades,~~ and Customer-Funded Upgrades that are Direct Connection 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. Interconnected Transmission Owner's oversight costs shall be consistent with Attachment GG, Appendix III, section 6.2.2(a)(12). ~~Provided, however, such~~ If New Services Customer exercises the Option to Build pursuant to Appendix III, section 6.2.1, New Services Customer shall pay Interconnected Transmission Owner costs associated with its responsibilities pursuant to section 6.2.1 and in accordance with the amount agreed to by the Interconnected Transmission Owner and New Services Customer pursuant to Appendix III, section 6.2.1(a)(12). ~~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 this Upgrade CSA.~~ Transmission Provider shall bill New Service Customer, on behalf of Interconnected Transmission Owner, for Interconnected Transmission Owner's expected ~~Costs~~ costs during the subsequent three months. New Service Customer shall pay each bill within twenty (20) days after receipt thereof. Upon receipt of each of New Service Customer's payments of such bills, Transmission Provider shall reimburse the Interconnected Transmission Owner. New Service Customer may request that the Transmission Provider provide 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 this Appendix III shall govern the timing of the final cost reconciliation upon completion of the work.

9.4 Final Invoice.

Within 120 days after Transmission Owner completes construction and installation of the Direct Assignment Facilities and/or Customer-Funded Upgrades under this Upgrade CSA, Transmission Provider shall provide New Service Customer with 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 responsibility under the PJM Tariff for the Costs of the Direct Assignment Facilities and/or Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA; and (b) New Service Customer's previous aggregate payments to Transmission Provider for the Costs of the facilities identified in Appendix I to this Upgrade CSA. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment to the New Service Customer or the 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 Party owing the payment.

9.5 Disputes.

In the event of a billing dispute among the Transmission Provider, Transmission Owner, and New Service Customer, Transmission Provider and the Transmission Owner shall continue to perform their respective obligations pursuant to this Upgrade CSA so long as: (a) the New Service Customer continues to make all payments not in dispute, and the Security held by the

Transmission Provider while the dispute is pending exceeds the amount in dispute; or (b) the New Service Customer pays to Transmission Provider, or into an independent escrow account established by the New Service Customer, the portion of the invoice in dispute, pending resolution of such dispute. If the New Service Customer fails to meet any of these requirements, then Transmission Provider shall so inform the other Parties and Transmission Provider or the Transmission Owner may provide notice to New Service Customer of a Breach pursuant to Section 13 of this Appendix III.

9.6 Interest.

Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment.

9.7 No Waiver.

Payment of an invoice shall not relieve New Service Customer from any other responsibilities or obligations it has under this Upgrade CSA, nor shall such payment constitute a waiver of any claims arising hereunder.

SCHEDULE C

TRANSMISSION OWNER INTERCONNECTION FACILITIES TO BE BUILT BY NEW SERVICE CUSTOMER PURSUANT TO OPTION TO BUILD

Section(s) of the
PJM Reliability Assurance Agreement

(Marked / Redline Format)

ARTICLE 1 – DEFINITIONS

Unless the context otherwise specifies or requires, capitalized terms used herein shall have the respective meanings assigned herein or in the Schedules hereto, or in the PJM Tariff or PJM Operating Agreement if not otherwise defined in this Agreement, for all purposes of this Agreement (such definitions to be equally applicable to both the singular and the plural forms of the terms defined). Unless otherwise specified, all references herein to Articles, Sections or Schedules, are to Articles, Sections or Schedules of this Agreement. As used in this Agreement:

Agreement:

"Agreement" shall mean this Reliability Assurance Agreement, together with all Schedules hereto, as amended from time to time.

Annual Demand Resource:

"Annual Demand Resource" shall mean a resource that is placed under the direction of the Office of the Interconnection during the Delivery Year, and will be available for an unlimited number of interruptions during such Delivery Year by the Office of the Interconnection, and will be capable of maintaining each such interruption between the hours of 10:00AM to 10:00PM Eastern Prevailing Time for the months of June through October and the following May, and 6:00AM through 9:00PM Eastern Prevailing Time for the months of November through April unless there is an Office of the Interconnection approved maintenance outage during October through April. The Annual Demand Resource must be available in the corresponding Delivery year to be offered for sale or Self-Supplied in an RPM Auction, or included as an Annual Demand Resource in an FRR Capacity Plan for the corresponding Delivery Year.

Annual Energy Efficiency Resource:

"Annual Energy Efficiency Resource" shall mean a project, including installation of more efficient devices or equipment or implementation of more efficient processes or systems, meeting the requirements of Reliability Assurance Agreement, Schedule 6 and exceeding then-current building codes, appliance standards, or other relevant standards, designed to achieve a continuous (during the summer and winter periods described in such Schedule 6 and the PJM Manuals) reduction in electric energy consumption that is not reflected in the peak load forecast prepared for the Delivery Year for which the Energy Efficiency Resource is proposed, and that is fully implemented at all times during such Delivery Year, without any requirement of notice, dispatch, or operator intervention.

Applicable Regional Entity:

"Applicable Regional Entity" shall have the same meaning as in the PJM Tariff.

Base Capacity Demand Resource:

"Base Capacity Demand Resource" shall mean, for the 2018/2019 and 2019/2020 Delivery

Years, a resource that is placed under the direction of the Office of the Interconnection and that will be available June through September of a Delivery Year, and will be available to the Office of the Interconnection for an unlimited number of interruptions during such months, and will be capable of maintaining each such interruption for at least a 10-hour duration between the hours of 10:00AM to 10:00PM Eastern Prevailing Time. The Base Capacity Demand Resource must be available June through September in the corresponding Delivery Year to be offered for sale or self-supplied in an RPM Auction, or included as a Base Capacity Demand Resource in an FRR Capacity Plan for the corresponding Delivery Year.

Base Capacity Energy Efficiency Resource:

"Base Capacity Energy Efficiency Resource" shall mean, for the 2018/2019 and 2019/2020 Delivery Years, a project, including installation of more efficient devices or equipment or implementation of more efficient processes or systems, meeting the requirements of RAA, Schedule 6 and exceeding then-current building codes, appliance standards, or other relevant standards, designed to achieve a continuous (during the summer peak periods as described in Reliability Assurance Agreement, Schedule 6 and the PJM Manuals) reduction in electric energy consumption that is not reflected in the peak load forecast prepared for the Delivery Year for which the Base Capacity Energy Efficiency Resource is proposed, and that is fully implemented at all times during such Delivery Year, without any requirement of notice, dispatch, or operator intervention.

Base Capacity Resource:

"Base Capacity Resource" shall have the same meaning as in Tariff, Attachment DD.

Base Residual Auction:

"Base Residual Auction" shall have the same meaning as in Tariff, Attachment DD.

Behind The Meter Generation:

"Behind The Meter Generation" shall refer to a generating unit that delivers energy to load without using the Transmission System or any distribution facilities (unless the entity that owns or leases the distribution facilities consented to such use of the distribution facilities and such consent has been demonstrated to the satisfaction of the Office of the Interconnection; provided, however, that Behind The Meter Generation does not include (i) at any time, any portion of such generating unit's capacity that is designated as a Capacity Resource or (ii) in any hour, any portion of the output of such generating unit that is sold to another entity for consumption at another electrical location or into the PJM Interchange Energy Market.

Black Start Capability:

"Black Start Capability" shall mean the ability of a generating unit or station to go from a shutdown condition to an operating condition and start delivering power without assistance from the power system.

Capacity Emergency Transfer Objective (CETO):

"Capacity Emergency Transfer Objective" or "CETO" shall mean the amount of electric energy that a given area must be able to import in order to remain within a loss of load expectation of one event in 25 years when the area is experiencing a localized capacity emergency, as determined in accordance with the PJM Manuals. Without limiting the foregoing, CETO shall be calculated based in part on EFORD determined in accordance with Reliability Assurance Agreement, Schedule 5, Paragraph C.

Capacity Emergency Transfer Limit (CETL):

Capacity Emergency Transfer Limit" or "CETL" shall mean the capability of the transmission system to support deliveries of electric energy to a given area experiencing a localized capacity emergency as determined in accordance with the PJM Manuals.

Capacity Import Limit:

For any Delivery Year up to and including the 2019/2020 Delivery Year, "Capacity Import Limit" shall mean, (a) for the PJM Region, (1) the maximum megawatt quantity of external Generation Capacity Resources that PJM determines for each Delivery Year, through appropriate modeling and the application of engineering judgment, the transmission system can receive, in aggregate at the interface of the PJM Region with all external balancing authority areas and deliver to load in the PJM Region under capacity emergency conditions without violating applicable reliability criteria on any bulk electric system facility of 100kV or greater, internal or external to the PJM Region, that has an electrically significant response to transfers on such interface, minus (2) the then-applicable Capacity Benefit Margin; and (b) for certain source zones identified in the PJM manuals as groupings of one or more balancing authority areas, (1) the maximum megawatt quantity of external Generation Capacity Resources that PJM determines the transmission system can receive at the interface of the PJM Region with each such source zone and deliver to load in the PJM Region under capacity emergency conditions without violating applicable reliability criteria on any bulk electric system facility of 100kV or greater, internal or external to the PJM Region, that has an electrically significant response to transfers on such interface, minus the then-applicable Capacity Benefit Margin times (2) the ratio of the maximum import quantity from each such source zone divided by the PJM total maximum import quantity. As more fully set forth in the PJM Manuals, PJM shall make such determination based on the latest peak load forecast for the studied period, the same computer simulation model of loads, generation and transmission topography employed in the determination of Capacity Emergency Transfer Limit for such Delivery Year, including external facilities from an industry standard model of the loads, generation, and transmission topography of the Eastern Interconnection under peak conditions. PJM shall specify in the PJM Manuals the areas and minimum distribution factors for identifying monitored bulk electric system facilities that have an electrically significant response to such transfers on the PJM interface. Employing such tools, PJM shall model increased power transfers from external areas into PJM to determine the transfer level at which one or more reliability criteria is violated on any monitored bulk electric system facilities that have an electrically significant response to such transfers. For the

PJM Region Capacity Import Limit, PJM shall optimize transfers from other source areas not experiencing any reliability criteria violations as appropriate to increase the Capacity Import Limit. The aggregate megawatt quantity of transfers into PJM at the point where any increase in transfers on the interface would violate reliability criteria will establish the Capacity Import Limit. Notwithstanding the foregoing, a Capacity Resource located outside the PJM Region shall not be subject to the Capacity Import Limit if the Capacity Market Seller seeks an exception thereto by demonstrating to PJM, by no later than five (5) business days prior to the commencement of the offer period for the relevant RPM Auction, that such resource meets all of the following requirements:

(i) it has, at the time such exception is requested, met all applicable requirements to be pseudo-tied into the PJM Region, or the Capacity Market Seller has committed in writing that it will meet such requirements, unless prevented from doing so by circumstances beyond the control of the Capacity Market Seller, prior to the relevant Delivery Year;

(ii) at the time such exception is requested, it has long-term firm transmission service confirmed on the complete transmission path from such resource into PJM; and

(iii) it is, by written commitment of the Capacity Market Seller, subject to the same obligations imposed on Generation Capacity Resources located in the PJM Region by Tariff, Attachment DD, section 6.6 to offer their capacity into RPM Auctions; provided, however, that (a) the total megawatt quantity of all exceptions granted hereunder for a Delivery Year, plus the Capacity Import Limit for the applicable interface determined for such Delivery Year, may not exceed the total megawatt quantity of Network External Designated Transmission Service on such interface that PJM has confirmed for such Delivery Year; and (b) if granting a qualified exception would result in a violation of the rule in clause (a), PJM shall grant the requested exception but reduce the Capacity Import Limit by the quantity necessary to ensure that the total quantity of Network External Designated Transmission Service is not exceeded.

Capacity Only Option:

"Capacity Only Option" shall mean participation in Emergency Load Response Program or Pre-Emergency Program which allows, pursuant to Tariff, Attachment DD and as applicable, a capacity payment for the ability to reduce load during a pre-emergency or emergency event.

Capacity Performance Resource:

"Capacity Performance Resource" shall have the same meaning as in Tariff, Attachment DD.

Capacity Resources:

"Capacity Resources" shall mean megawatts of (i) net capacity from Existing Generation Capacity Resources or Planned Generation Capacity Resources meeting the requirements of the Reliability Assurance Agreement, Schedules 9 and Reliability Assurance Agreement, Schedule 10 that are or will be owned by or contracted to a Party and that are or will be committed to satisfy that Party's obligations under the Reliability Assurance Agreement, or to satisfy the reliability requirements of the PJM Region, for a Delivery Year; (ii) net capacity from Existing

Generation Capacity Resources or Planned Generation Capacity Resources not owned or contracted for by a Party which are accredited to the PJM Region pursuant to the procedures set forth in such Schedules 9 and 10; ~~and~~ or (iii) load reduction capability provided by Demand Resources or Energy Efficiency Resources that are accredited to the PJM Region pursuant to the procedures set forth in the Reliability Assurance Agreement, Schedule 6.

Capacity Transfer Right:

"Capacity Transfer Right" shall have the meaning specified in Tariff, Attachment DD.

Compliance Aggregation Area (CAA):

"Compliance Aggregation Area" or "CAA" shall have the same meaning as in the Tariff.

Consolidated Transmission Owners Agreement, PJM Transmission Owners Agreement or Transmission Owners Agreement:

"Consolidated Transmission Owners Agreement," "PJM Transmission Owners Agreement" or "Transmission Owners Agreement" shall mean that certain Consolidated Transmission Owners Agreement, dated as of December 15, 2005, by and among the Transmission Owners and by and between the Transmission Owners and PJM Interconnection, L.L.C. on file with the Commission, as amended from time to time.

Control Area:

"Control Area" shall mean an electric power system or combination of electric power systems bounded by interconnection metering and telemetry to which a common generation control scheme is applied in order to:

(a) match the power output of the generators within the electric power system(s) and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);

(b) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;

(c) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice and the criteria of NERC and each Applicable Regional Entity;

(d) maintain power flows on transmission facilities within appropriate limits to preserve reliability; and

(e) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

Daily Unforced Capacity Obligation:

"Daily Unforced Capacity Obligation" shall mean the capacity obligation of a Load Serving Entity during the Delivery Year, determined in accordance with the Reliability Assurance Agreement, Schedule 8 or, as to an FRR Entity, in the Reliability Assurance Agreement, Schedule 8.1.

Delivery Year:

"Delivery Year" shall mean a Planning Period for which a Capacity Resource is committed pursuant to the auction procedures specified in Tariff, Attachment DD or pursuant to an FRR Capacity Plan under RAA, Schedule 8.1.

Demand Resource (DR):

"Demand Resource" or "DR" shall mean a Limited Demand Resource, Extended Summer Demand Resource, Annual Demand Resource, Base Capacity Demand Resource or Summer-Period Demand Resource with a demonstrated capability to provide a reduction in demand or otherwise control load in accordance with the requirements of RAA, Schedule 6 that offers and that clears load reduction capability in a Base Residual Auction or Incremental Auction or that is committed through an FRR Capacity Plan.

Demand Resource Factor or DR Factor:

"Demand Resource Factor" or "DR Factor" shall mean, for Delivery Years through May 31, 2018, that factor approved from time to time by the PJM Board used to determine the unforced capacity value of a Demand Resource in accordance with Reliability Assurance Agreement, Schedule 6

Demand Resource Officer Certification Form:

"Demand Resource Officer Certification Form" shall mean a certification as to an intended Demand Resource Sell Offer, in accordance with Reliability Assurance Agreement, Schedule 6 and Reliability Assurance Agreement, Schedule 8.1 and the PJM Manuals.

Demand Resource Registration:

"Demand Resource Registration" shall mean a registration in the Full Program Option or Capacity Only Option of the Emergency or Pre-Emergency Load Resource Program in accordance with Tariff, Attachment K-Appendix, section 8.

Demand Resource Sell Offer Plan:

"Demand Resource Sell Offer Plan" shall mean the plan required by Reliability Assurance Agreement, Schedule 6 and Reliability Assurance Agreement, Schedule 8.1 in support of an

intended offer of Demand Resources in an RPM Auction, or an intended inclusion of Demand Resources in an FRR Capacity Plan.

Electric Cooperative:

"Electric Cooperative" shall mean an entity owned in cooperative form by its customers that is engaged in the generation, transmission, and/or distribution of electric energy.

Electric Distributor:

"Electric Distributor" shall mean a Member that 1) owns or leases with rights equivalent to ownership of electric distribution facilities that are used to provide electric distribution service to electric load within the PJM Region; or 2) is a generation and transmission cooperative or a joint municipal agency that has a member that owns electric distribution facilities used to provide electric distribution service to electric load within the PJM Region.

Emergency:

"Emergency" shall mean (i) an abnormal system condition requiring manual or automatic action to maintain system frequency, or to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property; or (ii) a fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel; or (iii) a condition that requires implementation of emergency procedures as defined in the PJM Manuals.

End-Use Customer:

"End-Use Customer" shall mean a Member that is a retail end-user of electricity within the PJM Region. For purposes of Members Committee sector classification, a Member that is a retail end-user that owns generation may qualify as an End-Use customer if: (1) the average physical unforced capacity owned by the Member and its affiliates in the PJM region over the five Planning Periods immediately preceding the relevant Planning Period does not exceed the average PJM capacity obligation for the Member and its affiliates over the same time period; or (2) the average energy produced by the Member and its affiliates within the PJM region over the five Planning Periods immediately preceding the relevant Planning Period does not exceed the average energy consumed by that Member and its affiliates within the PJM region over the same time period. The foregoing notwithstanding, taking retail service may not be sufficient to qualify a Member as an End-Use Customer.

Energy Efficiency Resource:

"Energy Efficiency Resource" shall mean a project, including installation of more efficient devices or equipment or implementation of more efficient processes or systems, meeting the requirements of RAA, Schedule 6 and exceeding then-current building codes, appliance standards, or other relevant standards, designed to achieve a continuous (during the periods

described in Reliability Assurance Agreement, Schedule 6 and the PJM Manuals) reduction in electric energy consumption that is not reflected in the peak load forecast prepared for the Delivery Year for which the Energy Efficiency Resource is proposed, and that is fully implemented at all times during such Delivery Year, without any requirement of notice, dispatch, or operator intervention. Annual Energy Efficiency Resources, Base Capacity Energy Efficiency Resources and Summer-Period Energy Efficiency Resources are types of Energy Efficiency Resources.

Existing Demand Resource:

"Existing Demand Resource" shall mean a Demand Resource for which the Demand Resource Provider has identified existing end-use customer sites that are registered for the current Delivery Year with PJM (even if not registered by such Demand Resource Provider) and that the Demand Resource Provider reasonably expects to have under a contract to reduce load based on PJM dispatch instructions by the start of the Delivery Year for which such resource is offered.

Existing Generation Capacity Resource:

"Existing Generation Capacity Resource" shall mean, for purposes of the must-offer requirement and mitigation of offers for any RPM Auction for a Delivery Year, a Generation Capacity Resource that, as of the date on which bidding commences for such auction: (a) is in service; or (b) is not yet in service, but has cleared any RPM Auction for any prior Delivery Year. A Generation Capacity Resource shall be deemed to be in service if interconnection service has ever commenced (for resources located in the PJM Region), or if it is physically and electrically interconnected to an external Control Area and is in full commercial operation (for resources not located in the PJM Region). The additional megawatts of a Generation Capacity Resource that is being, or has been, modified to increase the number of megawatts of available installed capacity thereof shall not be deemed to be an Existing Generation Capacity Resource until such time as those megawatts (a) are in service; or (b) are not yet in service, but have cleared any RPM Auction for any prior Delivery Year.

Extended Summer Demand Resource:

"Extended Summer Demand Resource" shall mean, for Delivery Years through May 31, 2018, and for FRR Capacity Plans Delivery Years through May 31, 2019, a resource that is placed under the direction of the Office of the Interconnection and that will be available June through October and the following May, and will be available for an unlimited number of interruptions during such months by the Office of the Interconnection, and will be capable of maintaining each such interruption for at least a 10-hour duration between the hours of 10:00AM to 10:00PM Eastern Prevailing Time. The Extended Summer Demand Resource must be available June through October and the following May in the corresponding Delivery Year to be offered for sale or Self-Supplied in an RPM Auction, or included as an Extended Summer Demand Resource in an FRR Capacity Plan for the corresponding Delivery Year.

Facilities Study Agreement:

"Facilities Study Agreement" shall have the same meaning as in Tariff, Part VI, section 206.

FERC or Commission:

"FERC" or "Commission" shall mean the Federal Energy Regulatory Commission or any successor federal agency, commission or department exercising jurisdiction over the Tariff, Operating Agreement and Reliability Assurance Agreement.

Firm Point-To-Point Transmission Service:

"Firm Point-To-Point Transmission Service" shall have the meaning specified in the Tariff.

Firm Service Level:

"Firm Service Level" or "FSL" of Price Responsive Demand for the 2022/2023 Delivery Year and subsequent Delivery Years shall mean the level, determined at a PRD Substation level, to which Price Responsive Demand shall be reduced during the Delivery Year when an Emergency Action that triggers a Performance Assessment Interval is declared and the Locational Marginal Price exceeds the price associated with such Price Responsive Demand identified by the PRD Provider in its PRD Plan. "Firm Service Level" or "FSL" of Demand Resource shall mean the pre-determined level for which an end-use customer's load shall be reduced, upon notification from the Curtailment Service Provider's market operations center or its agent.

Firm Transmission Service:

"Firm Transmission Service" shall mean transmission service that is intended to be available at all times to the maximum extent practicable, subject to an Emergency, an unanticipated failure of a facility, or other event beyond the control of the owner or operator of the facility or the Office of the Interconnection.

Fixed Resource Requirement Alternative or FRR Alternative:

"Fixed Resource Requirement Alternative" or "FRR Alternative" shall mean an alternative method for a Party to satisfy its obligation to provide Unforced Capacity hereunder, as set forth in the Reliability Assurance Agreement, Schedule 8.1.

Forecast Pool Requirement:

"Forecast Pool Requirement" or "FPR" shall mean the amount equal to one plus the unforced reserve margin (stated as a decimal number) for the PJM Region required pursuant to this Reliability Assurance Agreement, as approved by the PJM Board pursuant to Reliability Assurance Agreement, Schedule 4.1.

FRR Capacity Plan or FRR Plan:

"FRR Capacity Plan" or "FRR Plan" shall mean a long-term plan for the commitment of Capacity Resources *and Price Responsive Demand* to satisfy the capacity obligations of a Party that has elected the FRR Alternative, as more fully set forth in the Reliability Assurance Agreement, Schedule 8.1.

FRR Entity:

"FRR Entity" shall mean, for the duration of such election, a Party that has elected the FRR Alternative hereunder.

FRR Service Area:

"FRR Service Area" shall mean (a) the service territory of an IOU as recognized by state law, rule or order; (b) the service area of a Public Power Entity or Electric Cooperative as recognized by franchise or other state law, rule, or order; or (c) a separately identifiable geographic area that is: (i) bounded by wholesale metering, or similar appropriate multi-site aggregate metering, that is visible to, and regularly reported to, the Office of the Interconnection, or that is visible to, and regularly reported to an Electric Distributor and such Electric Distributor agrees to aggregate the load data from such meters for such FRR Service Area and regularly report such aggregated information, by FRR Service Area, to the Office of the Interconnection; and (ii) for which the FRR Entity has or assumes the obligation to provide capacity for all load (including load growth) within such area. In the event that the service obligations of an Electric Cooperative or Public Power Entity are not defined by geographic boundaries but by physical connections to a defined set of customers, the FRR Service Area in such circumstances shall be defined as all customers physically connected to transmission or distribution facilities of such Electric Cooperative or Public Power Entity within an area bounded by appropriate wholesale aggregate metering as described above.

Full Program Option:

"Full Program Option" shall mean participation in Emergency Load Response Program or Pre-Emergency Program which allows, pursuant to Tariff, Attachment DD and as applicable, (i) an energy payment for load reductions during a pre-emergency or emergency event, and (ii) a capacity payment for the ability to reduce load during a pre-emergency or emergency event.

Full Requirements Service:

"Full Requirements Service" shall mean wholesale service to supply all of the power needs of a Load Serving Entity to serve end-users within the PJM Region that are not satisfied by its own generating facilities.

Generation Capacity Resource:

"Generation Capacity Resource" shall mean a ~~generation unit~~Generating Facility, or the contractual right to capacity from a specified ~~generation unit~~Generating Facility, that meets the requirements of RAA, Schedule 9 and RAA, Schedule 10, and, for ~~generation units~~Generating

Facilities that are committed to an FRR Capacity Plan, that meets the requirements of RAA, Schedule 8.1. A Generation Capacity Resource may be an Existing Generation Capacity Resource or a Planned Generation Capacity Resource.

Generation Owner:

"Generation Owner" shall mean a Member that owns or leases with rights equivalent to ownership, or otherwise controls and operates one or more operating generation resources located in the PJM Region. The foregoing notwithstanding, for a planned generation resource to qualify a Member as a Generation Owner, such resource shall have cleared an RPM auction, and for Energy Resources, the resource shall have a FERC-jurisdictional interconnection agreement or wholesale market participation agreement within PJM. Purchasing all or a portion of the output of a generation resource shall not be sufficient to qualify a Member as a Generation Owner. For purposes of Members Committee sector classification, a Member that is primarily a retail end-user of electricity that owns generation may qualify as a Generation Owner if: (1) the generation resource is the subject of a FERC-jurisdictional interconnection agreement or wholesale market participation agreement within PJM; (2) the average physical unforced capacity owned by the Member and its affiliates over the five Planning Periods immediately preceding the relevant Planning Period exceeds the average PJM capacity obligation of the Member and its affiliates over the same time period; and (3) the average energy produced by the Member and its affiliates within PJM over the five Planning Periods immediately preceding the relevant Planning Period exceeds the average energy consumed by the Member and its affiliates within PJM over the same time period.

Generator Forced Outage:

"Generator Forced Outage" shall mean an immediate reduction in output or capacity or removal from service, in whole or in part, of a generating unit by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the facility, as specified in the relevant portions of the PJM Manuals. A reduction in output or removal from service of a generating unit in response to changes in market conditions shall not constitute a Generator Forced Outage.

Generator Maintenance Outage:

"Generator Maintenance Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit in order to perform repairs on specific components of the facility, if removal of the facility qualifies as a maintenance outage pursuant to the PJM Manuals.

Generator Planned Outage:

"Generator Planned Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit for inspection, maintenance or repair with the approval of the Office of the Interconnection in accordance with the PJM Manuals.

Good Utility Practice:

"Good Utility Practice" shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather is intended to include acceptable practices, methods, or acts generally accepted in the region; including those practices required by Federal Power Act Section 215(a)(4).

Incremental Auction:

"Incremental Auction" shall mean any of several auctions conducted for a Delivery Year after the Base Residual Auction for such Delivery Year and before the first day of such Delivery Year, including the First Incremental Auction, Second Incremental Auction, Third Incremental Auction, or Conditional Incremental Auction. Incremental Auctions (other than the Conditional Incremental Auction), shall be held for the purposes of:

(i) allowing Market Sellers that committed Capacity Resources in the Base Residual Auction for a Delivery Year, which subsequently are determined to be unavailable to deliver the committed Unforced Capacity in such Delivery Year (due to resource retirement, resource cancellation or construction delay, resource derating, EFORd increase, a decrease in the Nominated Demand Resource Value of a Planned Demand Resource, delay or cancellation of a Qualifying Transmission Upgrade, or similar occurrences) to submit Buy Bids for replacement Capacity Resources; and

(ii) allowing the Office of the Interconnection to reduce or increase the amount of committed capacity secured in prior auctions for such Delivery Year if, as a result of changed circumstances or expectations since the prior auction(s), there is, respectively, a significant excess or significant deficit of committed capacity for such Delivery Year, for the PJM Region or for an LDA.

IOU:

"IOU" shall mean an investor-owned utility with substantial business interest in owning and/or operating electric facilities in any two or more of the following three asset categories: generation, transmission, distribution.

Limited Demand Resource:

"Limited Demand Resource" shall mean, for Delivery Years through May 31, 2018, and for FRR Capacity Plans Delivery Years through May 31, 2019, a resource that is placed under the direction of the Office of the Interconnection and that will, at a minimum, be available for interruption for at least 10 Load Management Events during the summer period of June through

September in the Delivery Year, and will be capable of maintaining each such interruption for at least a 6-hour duration. At a minimum, the Limited Demand Resource shall be available for such interruptions on weekdays, other than NERC holidays, from 12:00PM (noon) to 8:00PM Eastern Prevailing Time. The Limited Demand Resource must be available during the summer period of June through September in the corresponding Delivery Year to be offered for sale or Self-Supplied in an RPM Auction, or included as a Limited Demand Resource in an FRR Capacity Plan for the corresponding Delivery Year.

Load Serving Entity or LSE:

"Load Serving Entity" or "LSE" shall mean any entity (or the duly designated agent of such an entity), including a load aggregator or power marketer, (i) serving end-users within the PJM Region, and (ii) that has been granted the authority or has an obligation pursuant to state or local law, regulation or franchise to sell electric energy to end-users located within the PJM Region. Load Serving Entity shall include any end-use customer that qualifies under state rules or a utility retail tariff to manage directly its own supply of electric power and energy and use of transmission and ancillary services.

Locational Reliability Charge:

"Locational Reliability Charge" shall mean the charge determined pursuant to Operating Agreement, Schedule 8.

Markets and Reliability Committee:

"Markets and Reliability Committee" shall mean the committee established pursuant to the Operating Agreement as a Standing Committee of the Members Committee.

Maximum Emergency Service Level:

"Maximum Emergency Service Level" or "MESL" of Price Responsive Demand for the 2017/2018 through the 2021/2022 Delivery Years shall mean the level, determined at a PRD Substation level, to which Price Responsive Demand shall be reduced during the Delivery Year when a Maximum Generation Emergency is declared and the Locational Marginal Price exceeds the price associated with such Price Responsive Demand identified by the PRD Provider in its PRD Plan.

Member:

"Member" shall have the meaning provided in the Operating Agreement.

Members Committee:

"Members Committee" shall mean the committee specified in Operating Agreement, section 8 composed of the representatives of all the Members.

NERC:

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

Network External Designated Transmission Service:

"Network External Designated Transmission Service" shall mean the quantity of network transmission service confirmed by PJM for use by a market participant to import power and energy from an identified Generation Capacity Resource located outside the PJM Region, upon demonstration by such market participant that it owns such Generation Capacity Resource, has an executed contract to purchase power and energy from such Generation Capacity Resource, or has a contract to purchase power and energy from such Generation Capacity Resource contingent upon securing firm transmission service from such resource.

Network Resources:

"Network Resources" shall have the meaning set forth in the PJM Tariff.

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.

Nominal PRD Value:

"Nominal PRD Value" shall mean, as to any PRD Provider, an adjustment, determined in accordance with *Reliability Assurance* Agreement, Schedule 6.1, to the peak-load forecast used to determine the quantity of capacity sought through an RPM Auction, reflecting the aggregate effect of Price Responsive Demand on peak load resulting from the Price Responsive Demand to be provided by such PRD Provider.

Nominated Demand Resource Value:

"Nominated Demand Resource Value" shall have the meaning specified in Tariff, Attachment DD.

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, and electric distribution companies to serve load.

Obligation Peak Load:

"Obligation Peak Load" shall have the meaning specified in *Reliability Assurance* Agreement, Schedule 8.

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.

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

"Operating Agreement of the PJM Interconnection, L.L.C.," "Operating Agreement" or "PJM 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, on file with the Commission.

Operating Day:

"Operating Day" shall have the same meaning as provided in the Operating Agreement.

Operating Reserve:

"Operating Reserve" shall mean the amount of generating capacity scheduled to be available for a specified period of an Operating Day to ensure the reliable operation of the PJM Region, as specified in the PJM Manuals.

Other Supplier:

"Other Supplier" shall mean a Member that: (i) is engaged in buying, selling or transmitting electric energy, capacity, ancillary services, Financial Transmission Rights or other services available under PJM's governing documents in or through the Interconnection or has a good faith intent to do so, and (ii) is not a Generation Owner, Electric Distributor, Transmission Owner or End-Use Customer.

Partial Requirements Service:

"Partial Requirements Service" shall mean wholesale service to supply a specified portion, but not all, of the power needs of a Load Serving Entity to serve end-users within the PJM Region that are not satisfied by its own generating facilities.

Party:

"Party" shall mean an entity bound by the terms of the Operating Agreement.

Peak Shaving Adjustment:

"Peak Shaving Adjustment" shall mean a load forecast mechanism that allows load reductions by end-use customers to result in a downward adjustment of the summer load forecast for the associated Zone. Any End-Use Customer identified in an approved peak shaving plan shall not also participate in PJM Markets as Price Responsive Demand, Demand Resource, Base Capacity Demand Resource, Capacity Performance Demand Resource, or Economic Load Response Participant.

Performance Assessment Interval:

"Performance Assessment Interval" shall have the meaning specified in Tariff, Attachment DD.

Percentage Internal Resources Required:

"Percentage Internal Resources Required" shall mean, for purposes of an FRR Capacity Plan, the percentage of the LDA Reliability Requirement for an LDA that must be satisfied with Capacity Resources located in such LDA.

PJM:

"PJM" shall mean PJM Interconnection, L.L.C., including the Office of the Interconnection as referenced in the PJM Operating Agreement. When such term is being used in the RAA it shall also include the PJM Board.

PJM Board:

"PJM Board" shall mean the Board of Managers of the LLC, acting pursuant to the Operating Agreement, except when such term is being used in Tariff, Attachment M, 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 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.

PJM Tariff, Tariff, O.A.T.T., OATT or PJM Open Access Transmission Tariff:

"PJM Tariff," "Tariff," "O.A.T.T., "OATT" or "PJM Open Access Transmission 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 Region:

"PJM Region" shall have the same meaning as provided in the Operating Agreement.

PJM Region Installed Reserve Margin:

"PJM Region Installed Reserve Margin" shall mean the percent installed reserve margin for the PJM Region required pursuant to *Reliability Assurance Agreement,* Schedule 4.1, as approved by the PJM Board .

Planned Demand Resource:

"Planned Demand Resource" shall mean any Demand Resource that does not currently have the capability to provide a reduction in demand or to otherwise control load, but that is scheduled to be capable of providing such reduction or control on or before the start of the Delivery Year for which such resource is to be committed, as determined in accordance with the requirements of *Reliability Assurance* Agreement, Schedule 6. As set forth in *Reliability Assurance* Agreement, Schedule 6 and *Reliability Assurance* Agreement, Schedule 8.1, a Demand Resource Provider submitting a DR Sell Offer Plan shall identify as Planned Demand Resources in such plan all Demand Resources in excess of those that qualify as Existing Demand Resources.

Planned External Generation Capacity Resource:

"Planned External Generation Capacity Resource" shall mean a proposed Generation Capacity Resource, or a proposed increase in the capability of a Generation Capacity Resource, that (a) is to be located outside the PJM Region, (b) participates in the generation interconnection process of a Control Area external to PJM, (c) is scheduled to be physically and electrically interconnected to the transmission facilities of such Control Area on or before the first day of the Delivery Year for which such resource is to be committed to satisfy the reliability requirements of the PJM Region, and (d) is in full commercial operation prior to the first day of such Delivery Year, such that it is sufficient to provide the Installed Capacity set forth in the Sell Offer forming the basis of such resource's commitment to the PJM Region. Prior to participation in any Base Residual Auction for such Delivery Year, the Capacity Market Seller must demonstrate that it has a fully executed system impact study agreement (or other documentation which is functionally equivalent to a System Impact Study Agreement under the PJM Tariff) or, for resources which are greater than 20MWs participating in a Base Residual Auction for the 2019/2020 Delivery Year and subsequent Delivery Years, an agreement or other documentation which is functionally equivalent to a Facilities Study Agreement under the PJM Tariff), with the transmission owner to whose transmission facilities or distribution facilities the resource is being directly connected, and, as applicable, the transmission provider. Prior to participating in any Incremental Auction for such Delivery Year, the Capacity Market Seller must demonstrate it has entered into an interconnection agreement, or such other documentation that is functionally equivalent to an Interconnection Service Agreement under the PJM Tariff, with the transmission owner to whose transmission facilities or distribution facilities the resource is being directly connected, and, as applicable, the transmission provider. A Planned External Generation Capacity Resource must provide evidence to PJM that it has been studied as a Network Resource, or such other similar interconnection product in such external Control Area, must

provide contractual evidence that it has applied for or purchased transmission service to be deliverable to the PJM border, and must provide contractual evidence that it has applied for transmission service to be deliverable to the bus at which energy is to delivered, the agreements for which must have been executed prior to participation in any Reliability Pricing Model Auction for such Delivery Year. Any such resource shall cease to be considered a Planned External Generation Capacity Resource as of the earlier of (i) the date that interconnection service commences as to such resource; or (ii) the resource has cleared an RPM Auction, in which case it shall become an Existing Generation Capacity Resource for purposes of the mitigation of offers for any RPM Auction for all subsequent Delivery Years.

Planned Generation Capacity Resource:

"Planned Generation Capacity Resource" shall mean a Generation Capacity Resource, or additional megawatts to increase the size of a Generation Capacity Resource that is being or has been modified to increase the number of megawatts of available installed capacity thereof, participating in the generation interconnection process under Tariff, Part IV, Subpart A, as applicable, for which: (i) Interconnection Service is scheduled to commence on or before the first day of the Delivery Year for which such resource is to be committed to RPM or to an FRR Capacity Plan; (ii) for any such resource seeking to offer into a Base Residual Auction, or for any such resource of 20 MWs or less seeking to offer into a Base Residual Auction, a System Impact Study Agreement (or, for resources for which a System Impact Study Agreement is not required, has such other agreement or documentation that is functionally equivalent to a System Impact Study Agreement) has been executed prior to the Base Residual Auction for such Delivery Year; (iii) for any such resource of more than 20 MWs seeking to offer into a Base Residual Auction for the 2019/2020 Delivery Year and subsequent Delivery Years, a Facilities Study Agreement (or, for resources for which a Facilities Study Agreement is not required, has such other agreement or documentation that is functionally equivalent to a Facility Studies Agreement) has been executed prior to the Base Residual Auction for such Delivery Year; (iv) an Interconnection Service Agreement has been executed prior to any Incremental Auction for such Delivery Year in which such resource plans to participate; and (iv) no megawatts of capacity have cleared an RPM Auction for any prior Delivery Year. For purposes of the must-offer requirement and mitigation of offers for any RPM Auction for a Delivery Year, a Generation Capacity Resource shall cease to be considered a Planned Generation Capacity Resource as of the earlier of (i) the date that Interconnection Service commences as to such resource; or (ii) the resource has cleared an RPM Auction for any Delivery Year, in which case it shall become an Existing Generation Capacity Resource for any RPM Auction for all subsequent Delivery Years.

Planning Period:

"Planning Period" shall mean the 12 months beginning June 1 and extending through May 31 of the following year, or such other period approved by the Members Committee.

PRD Curve:

"PRD Curve" shall mean a price-consumption curve at a PRD Substation level, if available, and otherwise at a Zonal (or sub-Zonal LDA, if applicable) level, that details the base consumption level of Price Responsive Demand and the decreasing consumption levels at increasing prices.

PRD Provider:

"PRD Provider" shall mean (i) a Load Serving Entity that provides PRD; or (ii) an entity without direct load serving responsibilities that has entered contractual arrangements with end-use customers served by a Load Serving Entity that satisfy the eligibility criteria for Price Responsive Demand.

PRD Provider's Zonal Expected Peak Load Value of PRD:

"PRD Provider's Zonal Expected Peak Load Value of PRD" shall mean the expected contribution to Delivery Year peak load of a PRD Provider's Price Responsive Demand, were such demand not to be reduced in response to price, based on the contribution of the end-use customers comprising such Price Responsive Demand to the most recent prior Delivery Year's peak demand, escalated to the Delivery Year in question, as determined in a manner consistent with the Office of the Interconnection's load forecasts used for purposes of the RPM Auctions.

PRD Reservation Price:

"PRD Reservation Price" shall mean an RPM Auction clearing price identified in a PRD Plan for Price Responsive Demand load below which the PRD Provider desires not to commit the identified load as Price Responsive Demand.

PRD Substation:

"PRD Substation" shall mean an electrical substation that is located in the same Zone or in the same sub-Zonal LDA as the end-use customers identified in a PRD Plan or PRD registration and that, in terms of the electrical topography of the Transmission Facilities comprising the PJM Region, is as close as practicable to such loads**.**

Price Responsive Demand:

"Price Responsive Demand" or "PRD" shall mean end-use customer load registered by a PRD Provider pursuant to *Reliability Assurance Agreement,* Schedule 6.1 that have, as set forth in more detail in the PJM Manuals, the metering capability to record electricity consumption at an interval of one hour or less, Supervisory Control capable of curtailing such load (consistent with applicable RERRA requirements) at each PRD Substation identified in the relevant PRD Plan or PRD registration in response to a Maximum Generation Emergency declared by the Office of the Interconnection *(prior to 2022/2023 Delivery Year) or a Performance Assessment Interval that triggers a PRD performance assessment (effective with 2022/2023 Delivery Year)*, and a retail rate structure, or equivalent contractual arrangement, capable of changing retail rates as frequently as an hourly basis, that is linked to or based upon changes in real-time Locational

Marginal Prices at a PRD Substation level and that results in a predictable automated response to varying wholesale electricity prices.

Price Responsive Demand Credit:

"Price Responsive Demand Credit" shall mean a credit, based on committed Price Responsive Demand, as determined under *Reliability Assurance* Agreement, Schedule 6.1.

Price Responsive Demand Plan or PRD Plan:

"Price Responsive Demand Plan" or "PRD Plan" shall mean a plan, submitted by a PRD Provider and received by the Office of the Interconnection in accordance with *Reliability Assurance* Agreement, Schedule 6.1 and procedures specified in the PJM Manuals, claiming a peak demand limitation due to Price Responsive Demand to support the determination of such PRD Provider's Nominal PRD Value.

Public Power Entity:

"Public Power Entity" shall mean any agency, authority, or instrumentality of a state or of a political subdivision of a state, or any corporation wholly owned by any one or more of the foregoing, that is engaged in the generation, transmission, and/or distribution of electric energy.

Qualifying Transmission Upgrades:

"Qualifying Transmission Upgrades" shall have the meaning specified in Tariff, Attachment DD.

Relevant Electric Retail Regulatory Authority:

"Relevant Electric Retail Regulatory Authority" or "RERRA" shall have the meaning specified in the PJM Operating Agreement.

Reliability Principles and Standards:

"Reliability Principles and Standards" shall mean the principles and standards established by NERC or an Applicable Regional Entity to define, among other things, an acceptable probability of loss of load due to inadequate generation or transmission capability, as amended from time to time.

Required Approvals:

"Required Approvals" shall mean all of the approvals required for the Operating Agreement to be modified or to be terminated, in whole or in part, including the acceptance for filing by FERC and every other regulatory authority with jurisdiction over all or any part of the Operating Agreement.

Self-Supply:

"Self-Supply" shall have the meaning provided in Tariff, Attachment DD.

Small Commercial Customer:

"Small Commercial Customer" shall have the same meaning as in the PJM Tariff.

State Consumer Advocate:

"State Consumer Advocate" shall mean a legislatively created office from any State, all or any part of the territory of which is within the PJM Region, and the District of Columbia established, inter alia, for the purpose of representing the interests of energy consumers before the utility regulatory commissions of such states and the District of Columbia and the FERC.

State Regulatory Structural Change:

"State Regulatory Structural Change" shall mean as to any Party, a state law, rule, or order that, after September 30, 2006, initiates a program that allows retail electric consumers served by such Party to choose from among alternative suppliers on a competitive basis, terminates such a program, expands such a program to include classes of customers or localities served by such Party that were not previously permitted to participate in such a program, or that modifies retail electric market structure or market design rules in a manner that materially increases the likelihood that a substantial proportion of the customers of such Party that are eligible for retail choice under such a program (a) that have not exercised such choice will exercise such choice; or (b) that have exercised such choice will no longer exercise such choice, including for example, without limitation, mandating divestiture of utility-owned generation or structural changes to such Party's default service rules that materially affect whether retail choice is economically viable.

Summer-Period Demand Resource:

Summer-Period Demand Resource shall mean, for the 2020/2021 Delivery Year and subsequent Delivery Years, a resource that is placed under the direction of the Office of the Interconnection, and will be available June through October and the following May of the Delivery Year, and will be available for an unlimited number of interruptions during such months by the Office of the Interconnection, and will be capable of maintaining each such interruption between the hours of 10:00AM to 10:00PM Eastern Prevailing Time. The Summer-Period Demand Resource must be available June through October and the following May in the corresponding Delivery Year to be offered for sale in an RPM Auction, or included as a Summer-Period Demand Resource in an FRR Capacity Plan for the corresponding Delivery Year.

Summer-Period Energy Efficiency Resource:

Summer-Period Energy Efficiency Resource shall mean, for the 2020/2021 Delivery Year and subsequent Delivery Years, a project, including installation of more efficient devices or equipment or implementation of more efficient processes or systems, meeting the requirements

of Reliability Assurance Agreement, Schedule 6 and exceeding then-current building codes, appliance standards, or other relevant standards, designed to achieve a continuous (during the summer peak periods as described in Reliability Assurance Agreement, Schedule 6 and the PJM Manuals) reduction in electric energy consumption that is not reflected in the peak load forecast prepared for the Delivery Year for which the Summer-Period Energy Efficiency Resource is proposed, and that is fully implemented at all times during such Delivery Year, without any requirement of notice, dispatch, or operator intervention.

Supervisory Control:

"Supervisory Control" shall mean the capability to curtail, in accordance with applicable RERRA requirements, load registered as Price Responsive Demand at each PRD Substation identified in the relevant PRD Plan or PRD registration in response to a Maximum Generation Emergency declared by the Office of the Interconnection. Except to the extent automation is not required by the provisions of the Operating Agreement, the curtailment shall be automated, meaning that load shall be reduced automatically in response to control signals sent by the PRD Provider or its designated agent directly to the control equipment where the load is located without the requirement for any action by the end-use customer.

Threshold Quantity:

"Threshold Quantity" shall mean, as to any FRR Entity for any Delivery Year, the sum of (a) the Unforced Capacity equivalent (determined using the Pool-Wide Average EFORD) of the Installed Reserve Margin for such Delivery Year multiplied by the Preliminary Forecast Peak Load for which such FRR Entity is responsible under its FRR Capacity Plan for such Delivery Year, plus (b) the lesser of (i) 3% of the Unforced Capacity amount determined in (a) above or (ii) 450 MW. If the FRR Entity is not responsible for all load within a Zone, the Preliminary Forecast Peak Load for such entity shall be the FRR Entity's Obligation Peak Load last determined prior to the Base Residual Auction for such Delivery Year, times the Base FRR Scaling Factor (as determined in accordance with *Reliability Assurance* Agreement, Schedule 8.1).

Transmission Facilities:

"Transmission Facilities" shall mean facilities that: (i) are within the PJM Region; (ii) meet the definition of transmission facilities pursuant to FERC's Uniform System of Accounts or have been classified as transmission facilities in a ruling by FERC addressing such facilities; and (iii) have been demonstrated to the satisfaction of the Office of the Interconnection to be integrated with the PJM Region transmission system and integrated into the planning and operation of the PJM Region to serve all of the power and transmission customers within the PJM Region.

Transmission Owner:

"Transmission Owner" shall mean a Member that owns or leases with rights equivalent to ownership Transmission Facilities and is a signatory to the PJM Transmission Owners

Agreement. Taking transmission service shall not be sufficient to qualify a Member as a Transmission Owner.

Unforced Capacity:

"Unforced Capacity" shall mean installed capacity rated at summer conditions that is not on average experiencing a forced outage or forced derating, calculated for each Capacity Resource on the 12-month period from October to September without regard to the ownership of or the contractual rights to the capacity of the unit.

Winter Peak Load (or WPL):

"Winter Peak Load" or "WPL" shall mean the average of the Demand Resource *or PRD* customer's specific peak hourly load between hours ending 7:00 EPT through 21:00 EPT on the PJM defined 5 coincident peak days from December through February two Delivery Years prior the Delivery Year for which the registration is submitted. Notwithstanding, if the average use between hours ending 7:00 EPT through 21:00 EPT on a winter 5 coincident peak day is below 35% of the average hours ending 7:00 EPT through 21:00 EPT over all five of such peak days, then up to two such days and corresponding peak demand values may be excluded from the calculation. Upon approval by the Office of the Interconnection, a Curtailment Service Provider may provide alternative data to calculate Winter Peak Load, as outlined in the PJM Manuals, when there is insufficient hourly load data for the two Delivery Years prior to the relevant Delivery Year or if more than two days meet the exclusion criteria described above.

Zonal Capacity Price:

"Zonal Capacity Price" shall mean the clearing price required in each Zone to meet the demand for Unforced Capacity and satisfy Locational Deliverability Requirements for the LDA or LDAs associated with such Zone. If the Zone contains multiple LDAs with different Capacity Resource Clearing Prices, the Zonal Capacity Price shall be a weighted average of the Capacity Resource Clearing Prices for such LDAs, weighted by the Unforced Capacity of Capacity Resources cleared in each such LDA.

Zone or Zonal:

"Zone" or "Zonal" shall refer to an area within the PJM Region, as set forth in Tariff, Attachment J and RAA, Schedule 15, or as such areas may be (i) combined as a result of mergers or acquisitions or (ii) added as a result of the expansion of the boundaries of the PJM Region. A Zone shall include any Non-Zone Network Load located outside the PJM Region that is served from such Zone under Tariff, Attachment H-A.

Zonal Winter Weather Adjustment Factor (ZWWAF):

"Zonal Winter Weather Adjustment Factor" or "ZWWAF" shall mean the PJM zonal winter weather normalized coincident peak divided by PJM zonal average of 5 coincident peak loads in December through February.

Attachment B

PJM Open Access Transmission Tariff,
and
PJM Reliability Assurance Agreement

(Clean Format)

Section(s) of the
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Canadian Guaranty:

"Canadian Guaranty" shall mean a Corporate Guaranty provided by an Affiliate of a Participant that is domiciled in Canada, and meets all of the provisions of Tariff, Attachment Q.

Cancellation Costs:

"Cancellation Costs" shall mean costs and liabilities incurred in connection with: (a) cancellation of supplier and contractor written orders and agreements entered into to design, construct and install Attachment Facilities, Direct Assignment Facilities and/or Customer-Funded Upgrades, and/or (b) completion of some or all of the required Attachment Facilities, Direct Assignment Facilities and/or Customer-Funded Upgrades, or specific unfinished portions and/or removal of any or all of such facilities which have been installed, to the extent required for the Transmission Provider and/or Transmission Owner(s) to perform their respective obligations under Tariff, Part IV and/or Tariff, Part VI.

Capacity:

"Capacity" shall mean the installed capacity requirement of the Reliability Assurance Agreement or similar such requirements as may be established.

Capacity Emergency Transfer Limit:

"Capacity Emergency Transfer Limit" or "CETL" shall have the meaning provided in the Reliability Assurance Agreement.

Capacity Emergency Transfer Objective:

"Capacity Emergency Transfer Objective" or "CETO" shall have the meaning provided in the Reliability Assurance Agreement.

Capacity Export Transmission Customer:

"Capacity Export Transmission Customer" shall mean a customer taking point to point transmission service under Tariff, Part II to export capacity from a generation resource located in the PJM Region that has qualified for an exception to the RPM must-offer requirement as described in Tariff, Attachment DD, section 6.6(g).

Capacity Import Limit:

"Capacity Import Limit" shall have the meaning provided in the Reliability Assurance Agreement.

Capacity Interconnection Rights:

"Capacity Interconnection Rights" shall mean the rights to input generation as a Generation Capacity Resource into the Transmission System at the Point of Interconnection where the generating facilities connect to the Transmission System.

Capacity Market Buyer:

"Capacity Market Buyer" shall mean a Member that submits bids to buy Capacity Resources in any Incremental Auction.

Capacity Market Seller:

"Capacity Market Seller" shall mean a Member that owns, or has the contractual authority to control the output or load reduction capability of, a Capacity Resource, that has not transferred such authority to another entity, and that offers such resource in the Base Residual Auction or an Incremental Auction.

Capacity Performance Resource:

"Capacity Performance Resource" shall mean a Capacity Resource as described in Tariff, Attachment DD, section 5.5A(a).

Capacity Performance Transition Incremental Auction:

"Capacity Performance Transition Incremental Auction" shall have the meaning specified in Tariff, Attachment DD, section 5.14D.

Capacity Resource:

"Capacity Resource" shall have the meaning provided in the Reliability Assurance Agreement.

Capacity Resource Clearing Price:

"Capacity Resource Clearing Price" shall mean the price calculated for a Capacity Resource that offered and cleared in a Base Residual Auction or Incremental Auction, in accordance with Tariff, Attachment DD, section 5.

Capacity Storage Resource:

"Capacity Storage Resource" shall mean any Energy Storage Resource that participates in the Reliability Pricing Model or is otherwise treated as capacity in PJM's markets such as through a Fixed Resource Requirement Capacity Plan.

Capacity Transfer Right:

"Capacity Transfer Right" shall mean a right, allocated to LSEs serving load in a Locational Deliverability Area, to receive payments, based on the transmission import capability into such Locational Deliverability Area, that offset, in whole or in part, the charges attributable to the Locational Price Adder, if any, included in the Zonal Capacity Price calculated for a Locational Delivery Area.

Capacity Transmission Injection Rights:

"Capacity Transmission Injection Rights" shall mean the rights to schedule energy and capacity deliveries at a Point of Interconnection of a Merchant Transmission Facility with the Transmission System. Capacity Transmission Injection Rights may be awarded only to a Merchant D.C. Transmission Facility and/or Controllable A.C. Merchant Transmission Facilities that connects the Transmission System to another control area. Deliveries scheduled using Capacity Transmission Injection Rights have rights similar to those under Firm Point-to-Point Transmission Service or, if coupled with a generating unit external to the PJM Region that satisfies all applicable criteria specified in the PJM Manuals, similar to Capacity Interconnection Rights.

Cold/Warm/Hot Notification Time:

"Cold/Warm/Hot Notification Time" shall mean the time interval between PJM notification and the beginning of the start sequence for a generating unit that is currently in its cold/warm/hot temperature state. The start sequence may include steps such as any valve operation, starting feed water pumps, startup of auxiliary equipment, etc.

Cold/Warm/Hot Start-up Time:

For all generating units that are not combined cycle units, "Cold/Warm/Hot Start-up Time" shall mean the time interval, measured in hours, from the beginning of the start sequence to the point after generator breaker closure, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero for a generating unit in its cold/warm/hot temperature state. For combined cycle units, "Cold/Warm/Hot Start-up Time" shall mean the time interval from the beginning of the start sequence to the point after first combustion turbine generator breaker closure in its cold/warm/hot temperature state, which is typically indicated by telemetered or aggregated State Estimator megawatts greater than zero. For all generating units, the start sequence may include steps such as any valve operation, starting feed water pumps, startup of auxiliary equipment, etc. Other more detailed actions that could signal the beginning of the start sequence could include, but are not limited to, the operation of pumps, condensers, fans, water chemistry evaluations, checklists, valves, fuel systems, combustion turbines, starting engines or systems, maintaining stable fuel/air ratios, and other auxiliary equipment necessary for startup.

Cold Weather Alert:

"Cold Weather Alert" shall mean the notice that PJM provides to PJM Members, Transmission Owners, resource owners and operators, customers, and regulators to prepare personnel and facilities for expected extreme cold weather conditions.

Collateral:

"Collateral" shall be a cash deposit, including any interest, or letter of credit in an amount and form determined by and acceptable to PJMSettlement, provided by a Participant to PJMSettlement as security in order to participate in the PJM Markets or take Transmission Service.

Collateral Call:

"Collateral Call" shall mean a notice to a Participant that additional Collateral, or possibly early payment, is required in order to remain in, or to regain, compliance with Tariff, Attachment Q.

Commencement Date:

"Commencement Date" shall mean the date on which Interconnection Service commences in accordance with an Interconnection Service Agreement.

Committed Offer:

The "Committed Offer" shall mean 1) for pool-scheduled resources, an offer on which a resource was scheduled by the Office of the Interconnection for a particular clock hour for an Operating Day, and 2) for self-scheduled resources, either the offer on which the Market Seller has elected to schedule the resource or the applicable offer for the resource determined pursuant to Operating Agreement, Schedule 1, section 6.4, or Operating Agreement, Schedule 1, section 6.6 for a particular clock hour for an Operating Day.

Completed Application:

"Completed Application" shall mean an application that satisfies all of the information and other requirements of the Tariff, including any required deposit.

Compliance Aggregation Area (CAA):

"Compliance Aggregation Area" or "CAA" shall mean a geographic area of Zones or sub-Zones that are electrically-contiguous and experience for the relevant Delivery Year, based on Resource Clearing Prices of, for Delivery Years through May 31, 2018, Annual Resources and for the 2018/2019 Delivery Year and subsequent Delivery Years, Capacity Performance Resources, the same locational price separation in the Base Residual Auction, the same locational price separation in the First Incremental Auction, the same locational price separation in the Second Incremental Auction, the same locational price separation in the Third Incremental Auction.

Conditional Incremental Auction:

"Conditional Incremental Auction" shall mean an Incremental Auction conducted for a Delivery Year if and when necessary to secure commitments of additional capacity to address reliability criteria violations arising from the delay in a Backbone Transmission upgrade that was modeled in the Base Residual Auction for such Delivery Year.

CONE Area:

"CONE Area" shall mean the areas listed in Tariff, Attachment DD, section 5.10(a)(iv)(A) and any LDAs established as CONE Areas pursuant to Tariff, Attachment DD, section 5.10(a)(iv)(B).

Confidential Information:

"Confidential Information" shall mean any confidential, proprietary, or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy, or compilation relating to the present or planned business of a New Service Customer, Transmission Owner, or other Interconnection Party or Construction Party, which is designated as confidential by the party supplying the information, whether conveyed verbally, electronically, in writing, through inspection, or otherwise, and shall include, without limitation, all information relating to the producing party's technology, research and development, business affairs and pricing, and any information supplied by any New Service Customer, Transmission Owner, or other Interconnection Party or Construction Party to another such party prior to the execution of an Interconnection Service Agreement or a Construction Service Agreement.

Congestion Price:

"Congestion Price" shall mean the congestion component of the Locational Marginal Price, which is the effect on transmission congestion 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 line loadings, calculated as specified in Operating Agreement, Schedule 1, section 2, and the parallel provisions of Tariff, Attachment K-Appendix, section 2.

Consolidated Transmission Owners Agreement, PJM Transmission Owners Agreement or Transmission Owners Agreement:

"Consolidated Transmission Owners Agreement," "PJM Transmission Owners Agreement" or "Transmission Owners Agreement" shall mean the certain Consolidated Transmission Owners Agreement dated as of December 15, 2005, by and among the Transmission Owners and by and between the Transmission Owners and PJM Interconnection, L.L.C. on file with the Commission, as amended from time to time.

Constraint Relaxation Logic:

"Constraint Relaxation Logic" shall mean the logic applied in the market clearing software where the transmission limit is increased to prevent the Transmission Constraint Penalty Factor from setting the Marginal Value of a transmission constraint.

Constructing Entity:

"Constructing Entity" shall mean either the Transmission Owner or the New Services Customer, depending on which entity has the construction responsibility pursuant to Tariff, Part VI and the applicable Construction Service Agreement; this term shall also be used to refer to an Interconnection Customer with respect to the construction of the Customer Interconnection Facilities.

Construction Party:

"Construction Party" shall mean a party to a Construction Service Agreement. "Construction Parties" shall mean all of the Parties to a Construction Service Agreement.

Construction Service Agreement:

"Construction Service Agreement" shall mean either an Interconnection Construction Service Agreement or an Upgrade Construction Service Agreement.

Contingent Facilities:

"Contingent Facilities" shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request's costs, timing, and study findings are dependent and, if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

Control Area:

"Control Area" shall mean an electric power system or combination of electric power systems bounded by interconnection metering and telemetry to which a common automatic generation control scheme is applied in order to:

(1) match the power output of the generators within the electric power system(s) and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);

(2) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;

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

(4) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

Control Zone:

"Control Zone" shall have the meaning given in the Operating Agreement.

Controllable A.C. Merchant Transmission Facilities:

"Controllable A.C. Merchant Transmission Facilities" shall mean transmission facilities that (1) employ technology which Transmission Provider reviews and verifies will permit control of the amount and/or direction of power flow on such facilities to such extent as to effectively enable the controllable facilities to be operated as if they were direct current transmission facilities, and (2) that are interconnected with the Transmission System pursuant to Tariff, Part IV and Tariff, Part VI.

Coordinated External Transaction:

"Coordinated External Transaction" shall mean a transaction to simultaneously purchase and sell energy on either side of a CTS Enabled Interface in accordance with the procedures of Operating Agreement, Schedule 1, section 1.13, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.13.

Coordinated Transaction Scheduling:

"Coordinated Transaction Scheduling" or "CTS" shall mean the scheduling of Coordinated External Transactions at a CTS Enabled Interface in accordance with the procedures of Operating Agreement, Schedule 1, section 1.13, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.13.

Corporate Guaranty:

"Corporate Guaranty" shall mean a legal document used by an entity to guaranty the obligations of another entity.

Cost of New Entry:

"Cost of New Entry" or "CONE" shall mean the nominal levelized cost of a Reference Resource, as determined in accordance with Tariff, Attachment DD, section 5.

Costs:

As used in Tariff, Part IV, Tariff, Part VI and related attachments, "Costs" shall mean costs and expenses, as estimated or calculated, as applicable, including, but not limited to, capital expenditures, if applicable, and overhead, return, and the costs of financing and taxes and any Incidental Expenses.

Counterparty:

"Counterparty" shall mean PJMSettlement as the contracting party, in its name and own right and not as an agent, to an agreement or transaction with a Market Participant or other entities, including the agreements and transactions with customers regarding transmission service and other transactions under the PJM Tariff and the Operating Agreement. PJMSettlement shall not be a counterparty to (i) any bilateral transactions between Members, or (ii) any Member's self-supply of energy to serve its load, or (iii) any Member's self-schedule of energy reported to the Office of the Interconnection to the extent that energy serves that Member's own load .

Credit Available for Export Transactions:

"Credit Available for Export Transactions" shall mean a designation of credit to be used for Export Transactions that is allocated by each Market Participant from its Credit Available for Virtual Transactions, and which reduces the Market Participant's Credit Available for Virtual Transactions accordingly.

Credit Available for Virtual Transactions:

"Credit Available for Virtual Transactions" shall mean the Market Participant's Working Credit Limit for Virtual Transactions calculated on its credit provided in compliance with its Peak Market Activity requirement plus available credit submitted above that amount, less any unpaid billed and unbilled amounts owed to PJMSettlement, plus any unpaid unbilled amounts owed by PJMSettlement to the Market Participant, less any applicable credit required for Minimum Participation Requirements, FTRs, RPM activity, or other credit requirement determinants as defined in Tariff, Attachment Q.

Credit Breach:

"Credit Breach" shall mean the status of a Participant that does not currently meet the requirements of Tariff, Attachment Q or other provisions of the Agreements.

Credit-Limited Offer:

"Credit-Limited Offer" shall mean a Sell Offer that is submitted by a Market Participant in an RPM Auction subject to a maximum credit requirement specified by such Market Participant.

Credit Score:

"Credit Score" shall mean a composite numerical score scaled from 0-100 as calculated by PJMSettlement that incorporates various predictors of creditworthiness.

CTS Enabled Interface:

"CTS Enabled Interface" shall mean an interface between the PJM Control Area and an adjacent Control Area at which the Office of the Interconnection has authorized the use of Coordinated Transaction Scheduling ("CTS"). The CTS Enabled Interfaces between the PJM Control Area and the New York Independent System Operator, Inc. Control Area shall be designated in the Joint Operating Agreement Among and Between New York Independent System Operator Inc. and PJM Interconnection, L.L.C., Schedule A (PJM Rate Schedule FERC No. 45). The CTS Enabled Interfaces between the PJM Control Area and the Midcontinent Independent System Operator, Inc. shall be designated consistent with Attachment 3, section 2 of the Joint Operating Agreement between Midcontinent Independent System Operator, Inc. and PJM Interconnection, L.L.C.

CTS Interface Bid:

"CTS Interface Bid" shall mean a unified real-time bid to simultaneously purchase and sell energy on either side of a CTS Enabled Interface in accordance with the procedures of Operating Agreement, Schedule 1, section 1.13, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.13.

Curtailment:

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

Curtailment Service Provider:

"Curtailment Service Provider" or "CSP" shall mean a Member or a Special Member, which action on behalf of itself or one or more other Members or non-Members, participates in the PJM Interchange Energy Market, Ancillary Services markets, and/or Reliability Pricing Model by causing a reduction in demand.

Customer Facility:

"Customer Facility" shall mean Generation Facilities or Merchant Transmission Facilities interconnected with or added to the Transmission System pursuant to an Interconnection Request under Tariff, Part IV.

Customer-Funded Upgrade:

"Customer-Funded Upgrade" shall mean any Network Upgrade, Local Upgrade, or Merchant Network Upgrade for which cost responsibility (i) is imposed on an Interconnection Customer or an Eligible Customer pursuant to Tariff, Part VI, section 217, or (ii) is voluntarily undertaken by a New Service Customer in fulfillment of an Upgrade Request. No Network Upgrade, Local Upgrade or Merchant Network Upgrade or other transmission expansion or enhancement shall be a Customer-Funded Upgrade if and to the extent that the costs thereof are included in the rate base of a public utility on which a regulated return is earned.

Customer Interconnection Facilities:

"Customer Interconnection Facilities" shall mean all facilities and equipment owned and/or controlled, operated and maintained by Interconnection Customer on Interconnection Customer's side of the Point of Interconnection identified in the appropriate appendices to the Interconnection Service Agreement and to the Interconnection Construction Service Agreement, including any modifications, additions, or upgrades made to such facilities and equipment, that are necessary to physically and electrically interconnect the Customer Facility with the Transmission System.

Daily Deficiency Rate:

"Daily Deficiency Rate" shall mean the rate employed to assess certain deficiency charges under Tariff, Attachment DD, section 7, Tariff, Attachment DD, section 8, Tariff, Attachment DD, section 9, or Tariff, Attachment DD, section 13.

Daily Unforced Capacity Obligation:

"Daily Unforced Capacity Obligation" shall mean the capacity obligation of a Load Serving Entity during the Delivery Year, determined in accordance with Reliability Assurance Agreement, Schedule 8, or, as to an FRR entity, in Reliability Assurance Agreement, Schedule 8.1.

Day-ahead Congestion Price:

"Day-ahead Congestion Price" shall mean the Congestion Price resulting from the Day-ahead Energy Market.

Day-ahead Energy Market:

"Day-ahead Energy Market" shall mean the schedule of commitments for the purchase or sale of energy and payment of Transmission Congestion Charges developed by the Office of the Interconnection as a result of the offers and specifications submitted in accordance with Operating Agreement, Schedule 1, section 1.10 and the parallel provisions of Tariff, Attachment K-Appendix, section 1.10.

Day-ahead Energy Market Injection Congestion Credits:

"Day-ahead Energy Market Injection Congestion Credits" shall mean those congestion credits paid to Market Participants for supply transactions in the Day-ahead Energy Market including generation schedules, Increment Offers, Up-to Congestion Transactions, import transactions, and Day-Ahead Pseudo-Tie Transactions.

Day-ahead Energy Market Transmission Congestion Charges:

"Day-ahead Energy Market Transmission Congestion Charges" shall be equal to the sum of Day-ahead Energy Market Withdrawal Congestion Charges minus [the sum of Day-ahead Energy Market Injection Congestion Credits plus any congestion charges calculated pursuant to the Joint Operating Agreement between the Midcontinent Independent Transmission System Operator, Inc. and PJM Interconnection, L.L.C. (PJM Rate Schedule FERC No. 38), plus any congestion charges calculated pursuant to the Joint Operating Agreement Among and Between New York Independent System Operator Inc. and PJM Interconnection, L.L.C. (PJM Rate Schedule FERC No. 45), plus any congestion charges calculated pursuant to agreements between the Office of the Interconnection and other entities, as applicable)].

Day-ahead Energy Market Withdrawal Congestion Charges:

"Day-ahead Energy Market Withdrawal Congestion Charges" shall mean those congestion charges collected from Market Participants for withdrawal transactions in the Day-ahead Energy Market from transactions including Demand Bids, Decrement Bids, Up-to Congestion Transactions, Export Transactions, and Day-Ahead Pseudo-Tie Transactions.

Day-ahead Loss Price:

"Day-ahead Loss Price" shall mean the Loss Price resulting from the Day-ahead Energy Market.

Day-ahead Prices:

"Day-ahead Prices" shall mean the Locational Marginal Prices resulting from the Day-ahead Energy Market.

Day-Ahead Pseudo-Tie Transaction:

"Day-Ahead Pseudo-Tie Transaction" shall mean a transaction scheduled in the Day-ahead Energy Market to the PJM-MISO interface from a generator within the PJM balancing authority area that Pseudo-Ties into the MISO balancing authority area.

Day-ahead Settlement Interval:

"Day-ahead Settlement Interval" shall mean the interval used by settlements, which shall be every one clock hour.

Day-ahead System Energy Price:

"Day-ahead System Energy Price" shall mean the System Energy Price resulting from the Day-ahead Energy Market.

Deactivation:

"Deactivation" shall mean the retirement or mothballing of a generating unit governed by Tariff, Part V.

Deactivation Avoidable Cost Credit:

"Deactivation Avoidable Cost Credit" shall mean the credit paid to Generation Owners pursuant to Tariff, Part V, section 114.

Deactivation Avoidable Cost Rate:

"Deactivation Avoidable Cost Rate" shall mean the formula rate established pursuant to Tariff, Part V, section 115 .

Deactivation Date:

"Deactivation Date" shall mean the date a generating unit within the PJM Region is either retired or mothballed and ceases to operate.

Decrement Bid:

"Decrement Bid" shall mean a type of Virtual Transaction that is a bid to purchase energy at a specified location in the Day-ahead Energy Market. A cleared Decrement Bid results in scheduled load at the specified location in the Day-ahead Energy Market.

Default:

As used in the Interconnection Service Agreement and Construction Service Agreement, "Default" shall mean the failure of a Breaching Party to cure its Breach in accordance with the applicable provisions of an Interconnection Service Agreement or Construction Service Agreement.

Delivering Party:

"Delivering Party" shall mean the entity supplying capacity and energy to be transmitted at Point(s) of Receipt.

Delivery Year:

"Delivery Year" shall mean the Planning Period for which a Capacity Resource is committed pursuant to the auction procedures specified in Tariff, Attachment DD, or pursuant to an FRR Capacity Plan under Reliability Assurance Agreement, Schedule 8.1.

Demand Bid:

"Demand Bid" shall mean a bid, submitted by a Load Serving Entity in the Day-ahead Energy Market, to purchase energy at its contracted load location, for a specified timeframe and megawatt quantity, that if cleared will result in energy being scheduled at the specified location

in the Day-ahead Energy Market and in the physical transfer of energy during the relevant Operating Day.

Demand Bid Limit:

"Demand Bid Limit" shall mean the largest MW volume of Demand Bids that may be submitted by a Load Serving Entity for any hour of an Operating Day, as determined pursuant to Operating Agreement, Schedule 1, section 1.10.1B, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.10.1B.

Demand Bid Screening:

"Demand Bid Screening" shall mean the process by which Demand Bids are reviewed against the applicable Demand Bid Limit, and rejected if they would exceed that limit, as determined pursuant to Operating Agreement, Schedule 1, section 1.10.1B, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.10.1B.

Demand Resource:

"Demand Resource" shall mean a resource with the capability to provide a reduction in demand.

Demand Resource Factor or DR Factor:

"Demand Resource Factor" or ("DR Factor") shall have the meaning specified in the Reliability Assurance Agreement.

Designated Agent:

"Designated Agent" shall mean any entity that performs actions or functions on behalf of the Transmission Provider, a Transmission Owner, an Eligible Customer, or the Transmission Customer required under the Tariff.

Designated Entity:

"Designated Entity" shall have the same meaning provided in the Operating Agreement.

Direct Assignment Facilities:

"Direct Assignment Facilities" shall mean facilities or portions of facilities that are constructed for the sole use/benefit of a particular Transmission Customer requesting service under the Tariff. Direct Assignment Facilities shall be specified in the Service Agreement that governs service to the Transmission Customer and shall be subject to Commission approval.

Direct Charging Energy:

"Direct Charging Energy" shall mean the energy that an Energy Storage Resource purchases from the PJM Interchange Energy Market and (i) later resells to the PJM Interchange Energy Market; or (ii) is lost to conversion inefficiencies, provided that such inefficiencies are an unavoidable component of the conversion, storage, and discharge process that is used to resell energy back to the PJM Interchange Energy Market.

Direct Load Control:

"Direct Load Control" shall mean load reduction that is controlled directly by the Curtailment Service Provider's market operations center or its agent, in response to PJM instructions.

Dispatch Rate:

"Dispatch Rate" shall mean the control signal, expressed in dollars per megawatt-hour, calculated and transmitted continuously and dynamically to direct the output level of all generation resources dispatched by the Office of the Interconnection in accordance with the Offer Data.

Dispatched Charging Energy:

"Dispatched Charging Energy" shall mean Direct Charging Energy that an Energy Storage Resource Model Participant receives from the electric grid pursuant to PJM dispatch while providing a service in the PJM markets.

Dynamic Schedule:

"Dynamic Schedule" shall have the same meaning provided in the Operating Agreement.

Dynamic Transfer:

"Dynamic Transfer" shall have the same meaning provided in the Operating Agreement.

Definitions – E - F

Economic-based Enhancement or Expansion:

"Economic-based Enhancement or Expansion" shall have the same meaning provided in the Operating Agreement.

Economic Load Response Participant:

"Economic Load Response Participant" shall mean a Member or Special Member that qualifies under Operating Agreement, Schedule 1, section 1.5A, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.5A, to participate in the PJM Interchange Energy Market and/or Ancillary Services markets through reductions in demand.

Economic Maximum:

"Economic Maximum" shall mean the highest incremental MW output level, submitted to PJM market systems by a Market Participant, that a unit can achieve while following economic dispatch.

Economic Minimum:

"Economic Minimum" shall mean the lowest incremental MW output level, submitted to PJM market systems by a Market Participant, that a unit can achieve while following economic dispatch.

Effective FTR Holder:

"Effective FTR Holder" shall mean:

(i) For an FTR Holder that is either a (a) privately held company, or (b) a municipality or electric cooperative, as defined in the Federal Power Act, such FTR Holder, together with any Affiliate, subsidiary or parent of the FTR Holder, any other entity that is under common ownership, wholly or partly, directly or indirectly, or has the ability to influence, directly or indirectly, the management or policies of the FTR Holder; or

(ii) For an FTR Holder that is a publicly traded company including a wholly owned subsidiary of a publicly traded company, such FTR Holder, together with any Affiliate, subsidiary or parent of the FTR Holder, any other PJM Member has over 10% common ownership with the FTR Holder, wholly or partly, directly or indirectly, or has the ability to influence, directly or indirectly, the management or policies of the FTR Holder; or

(iii) an FTR Holder together with any other PJM Member, including also any Affiliate, subsidiary or parent of such other PJM Member, with which it shares common ownership, wholly or partly, directly or indirectly, in any third entity which is a PJM Member (e.g., a joint venture).

EFORd:

"EFORd" shall have the meaning specified in the PJM Reliability Assurance Agreement.

Electrical Distance:

"Electrical Distance" shall mean, for a Generation Capacity Resource geographically located outside the metered boundaries of the PJM Region, the measure of distance, based on impedance and in accordance with the PJM Manuals, from the Generation Capacity Resource to the PJM Region.

Eligible Customer:

"Eligible Customer" shall mean:

(i) Any electric utility (including any Transmission Owner and any power marketer), Federal power marketing agency, or any person generating electric energy for sale for resale is an Eligible Customer under the Tariff. Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico. However, with respect to transmission service that the Commission is prohibited from ordering by Section 212(h) of the Federal Power Act, such entity is eligible only if the service is provided pursuant to a state requirement that the Transmission Provider or Transmission Owner offer the unbundled transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner.

(ii) Any retail customer taking unbundled transmission service pursuant to a state requirement that the Transmission Provider or a Transmission Owner offer the transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner, is an Eligible Customer under the Tariff. As used in Tariff, Part VI, Eligible Customer shall mean only those Eligible Customers that have submitted a Completed Application.

Emergency Action:

"Emergency Action" shall mean any emergency action for locational or system-wide capacity shortages that either utilizes pre-emergency mandatory load management reductions or other emergency capacity, or initiates a more severe action including, but not limited to, a Voltage Reduction Warning, Voltage Reduction Action, Manual Load Dump Warning, or Manual Load Dump Action.

Emergency Condition:

"Emergency Condition" shall mean a condition or situation (i) that in the judgment of any Interconnection Party is imminently likely to endanger life or property; or (ii) that in the judgment of the Interconnected Transmission Owner or Transmission Provider is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Transmission System, the Interconnection Facilities, or the

transmission systems or distribution systems to which the Transmission System is directly or indirectly connected; or (iii) that in the judgment of Interconnection Customer is imminently likely (as determined in a non-discriminatory manner) to cause damage to the Customer Facility or to the Customer Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions, provided that a Generation Interconnection Customer is not obligated by an Interconnection Service Agreement to possess black start capability. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not constitute an Emergency Condition, unless one or more of the enumerated conditions or situations identified in this definition also exists.

Emergency Load Response Program:

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

Energy Efficiency Resource:
"Energy Efficiency Resource" shall have the meaning specified in the PJM Reliability Assurance Agreement.

Energy Market Opportunity Cost:

"Energy Market 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 available run hours due to limitations imposed on the unit by Applicable Laws and Regulations, and (b) the forecasted future Locational Marginal Price at which the generating unit could run while not violating such limitations. Energy Market 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 compliance period, which compliance period is determined by the applicable regulatory authority and is reflected in the rules set forth in PJM Manual 15. Energy Market Opportunity Costs shall be limited to those resources which are specifically delineated in Operating Agreement, Schedule 2.

Energy Resource:

"Energy Resource" shall mean a Generating Facility that is not a Capacity Resource.

Energy Settlement Area:

"Energy Settlement Area" shall mean the bus or distribution of busses that represents the physical location of Network Load and by which the obligations of the Network Customer to PJM are settled.

Energy Storage Resource:

"Energy Storage Resource" shall mean a resource capable of receiving electric energy from the grid and storing it for later injection to the grid that participates in the PJM Energy, Capacity and/or Ancillary Services markets as a Market Participant.

Energy Storage Resource Model Participant:

"Energy Storage Resource Model Participant" shall mean an Energy Storage Resource utilizing the Energy Storage Resource Participation Model.

Energy Storage Resource Participation Model:

"Energy Storage Resource Participation Model" shall mean the participation model accepted by the Commission in Docket No. ER19-XXX-000.

Energy Transmission Injection Rights:

"Energy Transmission Injection Rights" shall mean the rights to schedule energy deliveries at a specified point on the Transmission System. Energy Transmission Injection Rights may be awarded only to a Merchant D.C. Transmission Facility that connects the Transmission System to another control area. Deliveries scheduled using Energy Transmission Injection Rights have rights similar to those under Non-Firm Point-to-Point Transmission Service.

Environmental Laws:

"Environmental Laws" shall mean applicable Laws or Regulations relating to pollution or protection of the environment, natural resources or human health and safety.

Environmentally-Limited Resource:

"Environmentally-Limited Resource" shall mean a resource which has a limit on its run hours imposed by a federal, state, or other governmental agency that will significantly limit its availability, on either a temporary or long-term basis. This includes a resource that is limited by a governmental authority to operating only during declared PJM capacity emergencies.

Equivalent Load:

"Equivalent Load" shall mean the sum of a Market Participant's net system requirements to serve its customer load in the PJM Region, if any, plus its net bilateral transactions.

Existing Generation Capacity Resource:

"Existing Generation Capacity Resource" shall have the meaning specified in the Reliability Assurance Agreement.

Export Credit Exposure:

"Export Credit Exposure" is determined for each Market Participant for a given Operating Day, and shall mean the sum of credit exposures for the Market Participant's Export Transactions for that Operating Day and for the preceding Operating Day.

Export Nodal Reference Price:

"Export Nodal Reference Price" at each location is the 97th percentile, shall be, the real-time hourly integrated price experienced over the corresponding two-month period in the preceding calendar year, calculated separately for peak and off-peak time periods. The two-month time periods used in this calculation shall be January and February, March and April, May and June, July and August, September and October, and November and December.

Export Transaction:

"Export Transaction" shall be a transaction by a Market Participant that results in the transfer of energy from within the PJM Control Area to outside the PJM Control Area. Coordinated External Transactions that result in the transfer of energy from the PJM Control Area to an adjacent Control Area are one form of Export Transaction.

Export Transaction Price Factor:

"Export Transaction Price Factor" for a prospective time interval shall be the greater of (i) PJM's forecast price for the time interval, if available, or (ii) the Export Nodal Reference Price, but shall not exceed the Export Transaction's dispatch ceiling price cap, if any, for that time interval. The Export Transaction Price Factor for a past time interval shall be calculated in the same manner as for a prospective time interval, except that the Export Transaction Price Factor may use a tentative or final settlement price, as available. If an Export Nodal Reference Price is not available for a particular time interval, PJM may use an Export Transaction Price Factor for that time interval based on an appropriate alternate reference price.

Export Transaction Screening:

"Export Transaction Screening" shall be the process PJM uses to review the Export Credit Exposure of Export Transactions against the Credit Available for Export Transactions, and deny or curtail all or a portion of an Export Transaction, if the credit required for such transactions is greater than the credit available for the transactions.

Export Transactions Net Activity:

"Export Transactions Net Activity" shall mean the aggregate net total, resulting from Export Transactions, of (i) Spot Market Energy charges, (ii) Transmission Congestion Charges, and (iii) Transmission Loss Charges, calculated as set forth in Operating Agreement, Schedule 1 and the parallel provisions of Tariff, Attachment K-Appendix. Export Transactions Net Activity may be positive or negative.

Extended Summer Demand Resource:

"Extended Summer Demand Resource" shall have the meaning specified in the Reliability Assurance Agreement.

Extended Summer Resource Price Adder:

"Extended Summer Resource Price Adder" shall mean, for Delivery Years through May 31, 2018, an addition to the marginal value of Unforced Capacity as necessary to reflect the price of Annual Resources and Extended Summer Demand Resources required to meet the applicable Minimum Extended Summer Resource Requirement.

External Market Buyer:

"External Market Buyer" shall mean a Market Buyer making purchases of energy from the PJM Interchange Energy Market for consumption by end-users outside the PJM Region, or for load in the PJM Region that is not served by Network Transmission Service.

External Resource:

"External Resource" shall mean a generation resource located outside the metered boundaries of the PJM Region.

Facilities Study:

"Facilities Study" shall be an engineering study conducted by the Transmission Provider (in coordination with the affected Transmission Owner(s)) to: (1) determine the required modifications to the Transmission Provider's Transmission System necessary to implement the conclusions of the System Impact Study; and (2) complete any additional studies or analyses documented in the System Impact Study or required by PJM Manuals, and determine the required modifications to the Transmission Provider's Transmission System based on the conclusions of such additional studies. The Facilities Study shall include the cost and scheduled completion date for such modifications, that will be required to provide the requested transmission service or to accommodate a New Service Request. As used in the Interconnection Service Agreement or Construction Service Agreement, Facilities Study shall mean that certain Facilities Study conducted by Transmission Provider (or at its direction) to determine the design and specification of the Customer Funded Upgrades necessary to accommodate the New Service Customer's New Service Request in accordance with Tariff, Part VI, section 207.

Federal Power Act:

"Federal Power Act" shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a, et seq.

FERC or Commission:

"FERC" or "Commission" shall mean the Federal Energy Regulatory Commission or any successor federal agency, commission or department exercising jurisdiction over the Tariff, Operating Agreement and Reliability Assurance Agreement.

FERC Market Rules:

"FERC Market Rules" mean the market behavior rules and the prohibition against electric energy market manipulation codified by the Commission in its Rules and Regulations at 18 CFR §§ 1c.2 and 35.37, respectively; the Commission-approved PJM Market Rules and any related proscriptions or any successor rules that the Commission from time to time may issue, approve or otherwise establish.

Final Offer:

"Final Offer" shall mean the offer on which a resource was dispatched by the Office of the Interconnection for a particular clock hour for the Operating Day.

Final RTO Unforced Capacity Obligation:

"Final RTO Unforced Capacity Obligation" shall mean the capacity obligation for the PJM Region, determined in accordance with RAA, Schedule 8.

Financial Close:

"Financial Close" shall mean the Capacity Market Seller has demonstrated that the Capacity Market Seller or its agent has completed the act of executing the material contracts and/or other documents necessary to (1) authorize construction of the project and (2) establish the necessary funding for the project under the control of an independent third-party entity. A sworn, notarized certification of an independent engineer certifying to such facts, and that the engineer has personal knowledge of, or has engaged in a diligent inquiry to determine, such facts, shall be sufficient to make such demonstration. For resources that do not have external financing, Financial Close shall mean the project has full funding available, and that the project has been duly authorized to proceed with full construction of the material portions of the project by the appropriate governing body of the company funding such project. A sworn, notarized certification by an officer of such company certifying to such facts, and that the officer has personal knowledge of, or has engaged in a diligent inquiry to determine, such facts, shall be sufficient to make such demonstration.

Financial Transmission Right:

"Financial Transmission Right" or "FTR" shall mean a right to receive Transmission Congestion Credits as specified in Operating Agreement, Schedule 1, section 5.2.2 and the parallel provisions of Tariff, Attachment K-Appendix, section 5.2.2.

Financial Transmission Right Obligation:

"Financial Transmission Right Obligation" shall mean a right to receive Transmission Congestion Credits as specified in Operating Agreement, Schedule 1, section 5.2.2(b), and the parallel provisions of Tariff, Attachment K-Appendix, section 5.2.2(b).

Financial Transmission Right Option:

"Financial Transmission Right Option" shall mean a right to receive Transmission Congestion Credits as specified in Operating Agreement, Schedule 1, section 5.2.2(c), and the parallel provisions of Tariff, Attachment K-Appendix, section 5.2.2(c).

Firm Point-To-Point Transmission Service:

"Firm Point-To-Point Transmission Service" shall mean Transmission Service under the Tariff that is reserved and/or scheduled between specified Points of Receipt and Delivery pursuant to Tariff, Part II.

Firm Transmission Feasibility Study:

"Firm Transmission Feasibility Study" shall mean a study conducted by the Transmission Provider in accordance with Tariff, Part II, section 19.3 and Tariff, Part III, section 32.3.

Firm Transmission Withdrawal Rights:

"Firm Transmission Withdrawal Rights" shall mean the rights to schedule energy and capacity withdrawals from a Point of Interconnection of a Merchant Transmission Facility with the Transmission System. Firm Transmission Withdrawal Rights may be awarded only to a Merchant D.C. Transmission Facility that connects the Transmission System with another control area. Withdrawals scheduled using Firm Transmission Withdrawal Rights have rights similar to those under Firm Point-to-Point Transmission Service.

First Incremental Auction:

"First Incremental Auction" shall mean an Incremental Auction conducted 20 months prior to the start of the Delivery Year to which it relates.

Flexible Resource:

"Flexible Resource" shall mean a generating resource that must have a combined Start-up Time and Notification Time of less than or equal to two hours; and a Minimum Run Time of less than or equal to two hours.

Forecast Pool Requirement:

"Forecast Pool Requirement" shall have the meaning specified in the Reliability Assurance Agreement.

Foreign Guaranty:

"Foreign Guaranty" shall mean a Corporate Guaranty provided by an Affiliate of a Participant that is domiciled in a foreign country, and meets all of the provisions of Tariff, Attachment Q.

Form 715 Planning Criteria:

"Form 715 Planning Criteria" shall have the same meaning provided in the Operating Agreement.

FTR Credit Limit:

"FTR Credit Limit" shall mean the amount of credit established with PJMSettlement that an FTR Participant has specifically designated to be used for FTR activity in a specific customer account. Any such credit so set aside shall not be considered available to satisfy any other credit requirement the FTR Participant may have with PJMSettlement.

FTR Credit Requirement:

"FTR Credit Requirement" shall mean the amount of credit that a Participant must provide in order to support the FTR positions that it holds and/or for which it is bidding. The FTR Credit Requirement shall not include months for which the invoicing has already been completed, provided that PJMSettlement shall have up to two Business Days following the date of the invoice completion to make such adjustments in its credit systems. FTR Credit Requirements are calculated and applied separately for each separate customer account.

FTR Flow Undiversified:

"FTR Flow Undiversified" shall have the meaning established in Tariff, Attachment Q, section V.G.

FTR Historical Value:

For each FTR for each month, "FTR Historical Value" shall mean the weighted average of historical values over three years for the FTR path using the following weightings: 50% - most recent year; 30% - second year; 20% - third year.

FTR Holder:

"FTR Holder" shall mean the PJM Member that has acquired and possesses an FTR.

FTR Monthly Credit Requirement Contribution:

For each FTR, for each month, "FTR Monthly Credit Requirement Contribution" shall mean the total FTR cost for the month, prorated on a daily basis, less the FTR Historical Value for the

month. For cleared FTRs, this contribution may be negative; prior to clearing, FTRs with negative contribution shall be deemed to have zero contribution.

FTR Net Activity:

"FTR Net Activity" shall mean the aggregate net value of the billing line items for auction revenue rights credits, FTR auction charges, FTR auction credits, and FTR congestion credits, and shall also include day-ahead and balancing/real-time congestion charges up to a maximum net value of the sum of the foregoing auction revenue rights credits, FTR auction charges, FTR auction credits and FTR congestion credits.

FTR Participant:

"FTR Participant" shall mean any Market Participant that provides or is required to provide Collateral in order to participate in PJM's FTR auctions.

FTR Portfolio Auction Value:

"FTR Portfolio Auction Value" shall mean for each customer account of a Market Participant, the sum, calculated on a monthly basis, across all FTRs, of the FTR price times the FTR volume in MW.

Fuel Cost Policy:

"Fuel Cost Policy" shall mean the document provided by a Market Seller to PJM and the Market Monitoring Unit in accordance with PJM Manual 15 and Operating Agreement, Schedule 2, which documents the Market Seller's method used to price fuel for calculation of the Market Seller's cost-based offers for a generation resource.

Full Notice to Proceed:

"Full Notice to Proceed" shall mean that all material third party contractors have been given the notice to proceed with construction by the Capacity Market Seller or its agent, with a guaranteed completion date backed by liquidated damages.

Definitions – G - H

Generating Facilities:

"Generating Facilities" shall mean Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

Generating Market Buyer:

"Generating Market Buyer" shall mean an Internal Market Buyer that is a Load Serving Entity that owns or has contractual rights to the output of generation resources capable of serving the Market Buyer's load in the PJM Region, or of selling energy or related services in the PJM Interchange Energy Market or elsewhere.

Generation Capacity Resource:

"Generation Capacity Resource" shall have the meaning specified in the Reliability Assurance Agreement.

Generation Interconnection Customer:

"Generation Interconnection Customer" shall mean an entity that submits an Interconnection Request to interconnect a new generation facility or to increase the capacity of an existing generation facility interconnected with the Transmission System in the PJM Region.

Generation Interconnection Facilities Study:

"Generation Interconnection Facilities Study" shall mean a Facilities Study related to a Generation Interconnection Request.

Generation Interconnection Feasibility Study:

"Generation Interconnection Feasibility Study" shall mean a study conducted by the Transmission Provider (in coordination with the affected Transmission Owner(s)) in accordance with Tariff, Part IV, section 36.2.

Generation Interconnection Request:

"Generation Interconnection Request" shall mean a request by a Generation Interconnection Customer pursuant to Tariff, Part IV, subpart A, to interconnect a generating unit with the Transmission System or to increase the capacity of a generating unit interconnected with the Transmission System in the PJM Region.

Generation Owner:

"Generation Owner" shall mean a Member that owns, leases with rights equivalent to ownership, or otherwise controls and operates one or more operating generation resources located in the PJM Region. The foregoing notwithstanding, for a planned generation resource to qualify a Member as a Generation Owner, such resource shall have cleared an RPM auction, and for Energy Resources, the resource shall have a FERC-jurisdictional interconnection agreement or wholesale market participation agreement within PJM. Purchasing all or a portion of the output of a generation resource shall not be sufficient to qualify a Member as a Generation Owner. For purposes of Members Committee sector classification, a Member that is primarily a retail end-user of electricity that owns generation may qualify as a Generation Owner if: (1) the generation resource is the subject of a FERC-jurisdictional interconnection agreement or wholesale market participation agreement within PJM; (2) the average physical unforced capacity owned by the Member and its affiliates over the five Planning Periods immediately preceding the relevant Planning Period exceeds the average PJM capacity obligation of the Member and its affiliates over the same time period; and (3) the average energy produced by the Member and its affiliates within PJM over the five Planning Periods immediately preceding the relevant Planning Period exceeds the average energy consumed by the Member and its affiliates within PJM over the same time period.

Generation Resource Maximum Output:

"Generation Resource Maximum Output" shall mean, for Customer Facilities identified in an Interconnection Service Agreement or Wholesale Market Participation Agreement, the Generation Resource Maximum Output for a generating unit shall equal the unit's pro rata share of the Maximum Facility Output, determined by the Economic Maximum values for the available units at the Customer Facility. For generating units not identified in an Interconnection Service Agreement or Wholesale Market Participation Agreement, the Generation Resource Maximum Output shall equal the generating unit's Economic Maximum.

Generator Forced Outage:

"Generator Forced Outage" shall mean an immediate reduction in output or capacity or removal from service, in whole or in part, of a generating unit by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the facility, as specified in the relevant portions of the PJM Manuals. A reduction in output or removal from service of a generating unit in response to changes in market conditions shall not constitute a Generator Forced Outage.

Generator Maintenance Outage:

"Generator Maintenance Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit in order to perform necessary repairs on specific components of the facility, if removal of the facility meets the guidelines specified in the PJM Manuals.

Generator Planned Outage:

"Generator Planned Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit for inspection, maintenance or repair with the approval of the Office of the Interconnection in accordance with the PJM Manuals.

Good Utility Practice:

"Good Utility Practice" shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather is intended to include acceptable practices, methods, or acts generally accepted in the region; including those practices required by Federal Power Act Section 215(a)(4).

Governmental Authority:

"Governmental Authority" shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, arbitrating body, or other governmental authority having jurisdiction over any Interconnection Party or Construction Party or regarding any matter relating to an Interconnection Service Agreement or Construction Service Agreement, as applicable.

Hazardous Substances:

"Hazardous Substance" shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

Hot Weather Alert:

"Hot Weather Alert" shall mean the notice provided by PJM to PJM Members, Transmission Owners, resource owners and operators, customers, and regulators to prepare personnel and facilities for extreme hot and/or humid weather conditions which may cause capacity requirements and/or unit unavailability to be substantially higher than forecast are expected to persist for an extended period.

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 Charging Energy:

"Load Serving Charging Energy" shall mean energy that is purchased from the PJM Interchange Energy Market and stored in an Energy Storage Resource for later resale to end-use load.

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 *reduction in megawatts due to* Regulation*,* Synchronized Reserve*, or Secondary 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, section 2.

M2M Flowgate:

"M2M Flowgate" shall have the meaning provided in the Joint Operating Agreement between the Midcontinent Independent Transmission System Operator, Inc. and PJM Interconnection, L.L.C.

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.

Marginal Value:

"Marginal Value" shall mean the incremental change in system dispatch costs, measured as a $/MW value incurred by providing one additional MW of relief to the transmission constraint.

Mark-to-Auction Value:

"Mark-to-Auction Value" shall mean the net increase (or decrease) in value of a portfolio of FTRs, as further described in Tariff, Attachment Q, section IV.C.9.

Market Monitor:

"Market Monitor**"** means the head of the Market Monitoring Unit.

Market Monitoring Unit or MMU:

"Market Monitoring Unit" or "MMU" means the independent Market Monitoring Unit defined in 18 CFR § 35.28(a)(7) and established under the PJM Market Monitoring Plan (Attachment M) to the PJM Tariff that is responsible for implementing the Market Monitoring Plan, including the Market Monitor. The Market Monitoring Unit may also be referred to as the IMM or Independent Market Monitor for PJM

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 Tariff, Attachment M, 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 Revenue Neutrality Offset:

"Market Revenue Neutrality Offset" shall mean the revenue in excess of the cost for a resource from the energy, Synchronized Reserve, Non-Synchronized Reserve, and Secondary Reserve markets realized from an increase in real-time market megawatt assignment from a day-ahead market megawatt assignment in any of these markets due to the decrease in the real-time reserve market megawatt assignment from a day-ahead reserve market megawatt assignment in any of the reserve markets.

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 in Tariff, Attachment T, 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 Tariff, Part

IV, section 36, 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 30-minute Reserve Requirement:

"Minimum 30-minute Reserve Requirement" shall mean the megawatts required to be maintained in a Reserve Zone or Reserve Sub-zone as 30-minute Reserve inclusive of any increase to account for additional reserves scheduled to address operational uncertainty. The Minimum 30-minute Reserve Requirement is calculated in accordance with the PJM Manuals and establishes the first segment on the Operating Reserve Demand Curve for 30-minute Reserve.

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 Primary Reserve Requirement:

"Minimum Primary Reserve Requirement" shall mean the megawatts required to be maintained in a Reserve Zone or Reserve Sub-zone as Primary Reserve, inclusive of any increase to account for additional reserves scheduled to address operational uncertainty. The Minimum Primary Reserve Requirement is calculated in accordance with the PJM Manuals, and establishes the first segment on the Operating Reserve Demand Curve for Primary Reserve.

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.

Minimum Synchronized Reserve Requirement:

"Minimum Synchronized Reserve Requirement" shall mean the megawatts required to be maintained in a Reserve Zone or Reserve Sub-zone as Synchronized Reserve, inclusive of any increase to account for additional reserves scheduled to address operational uncertainty. The Minimum Synchronized Reserve Requirement is calculated in accordance with the PJM Manuals, and establishes the first segment on the Operating Reserve Demand Curve for Synchronized Reserve.

MISO:

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

MTA Collateral Call:

"MTA Collateral Call" shall mean a demand for additional Collateral issued due to a credit shortfall arising from a Mark-to-Auction Value change. The requirements and remedies for an MTA Collateral Call may be different from the requirements and remedies for a Collateral Call.

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 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 Reliability Assurance Agreement, Article I.

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*, Non-Dispatched Charging Energy, and Load Serving Charging Energy*) 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 Load shall not include Dispatched Charging Energy.*

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 are not part of an Affected System; only serve the Customer Interconnection Facility; and have no impact or potential impact on the Transmission System until the final tie-in is complete. Both Transmission Provider and Interconnection Customer must agree as to what constitutes Direct Connection Network Upgrades and identify them in the Interconnection Construction Service Agreement, Schedule D. If the Transmission Provider and Interconnection Customer disagree about whether a particular Network Upgrade is a Direct Connection Network Upgrade, the Transmission Provider must provide the Interconnection Customer a written technical explanation outlining why the Transmission Provider does not consider the Network Upgrade to be a Direcct Connection Network Upgrade within 15 days of its determination.

(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-Dispatched Charging Energy:

"Non-Dispatched Charging Energy" shall mean all Direct Charging Energy that an Energy Storage Resource Model Participant receives from the electric grid that is not otherwise Dispatched Charging Energy.

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 Tariff, Attachment DD, section 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 Operating Agreement, Schedule 2.

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, section 1.5A.6.

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 PJMSettlement 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 PJMSettlement 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) or PJM Open Access Same-Time Information System:

"Open Access Same-Time Information System," "PJM Open Access Same-Time Information System" or "OASIS" shall mean the electronic communication and 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 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.

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

"Operating Agreement of the PJM Interconnection, L.L.C.," "Operating Agreement" or "PJM Operating Agreement" shall mean the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. 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., on file with the Commission.

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.

Operating Reserve Demand Curve:

"Operating Reserve Demand Curve" shall mean a curve with prices on the y-axis and megawatts on the x-axis, which defines the relationship between each incremental megawatt of reserves that can be used to meet a given reserve requirement and the value placed on maintaining that megawatt level of reserve, expressed in $/MWh.

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 Tariff, Attachment N-3.

Part I:

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

Part II:

"Part II" shall mean 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 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 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 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 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)*, plus 10% of such costs,* 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*, plus 10% of such costs,* 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.

Permissible Technological Advancement:

"Permissible Technological Advancement" shall mean a proposed technological change to turbines, inverters, or plant supervisory controls or other similar advancements to the technology proposed in the Interconnection Request that is submitted to the Transmission Provider with an executed System Impact Study Agreement provided such change does not (i) increase the capability of the Generating Facility as specified in the original Interconnection Request; or (ii) represent a different fuel type from the original Interconnection Request. Any proposed technological change submitted after an executed System Impact Study Agreement is submitted to the Transmission Provider shall be considered a Permissible Technological Advancement if it is not deemed to be a Material Modification pursuant to Tariff, Part IV, Subpart A, section 36.2A.3.

PJM:

"PJM" shall mean PJM Interconnection, L.L.C., including the Office of the Interconnection as referenced in the PJM Operating Agreement. When such term is being used in the RAA it shall also include the PJM Board.

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, acting pursuant to the Operating Agreement except when such term is being used in Tariff, Attachment M, 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 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 Operating Agreement and 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 inteval 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 Office of the Interconnection for the purchase and sale of spot electric energy at wholesale in interstate commerce and related servicesestablished pursuant to 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 Operating Agreement and 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 inteval 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 Operating Agreement and 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 PJMSettlement.

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, section 5.2.6).

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 mean the percent installed reserve margin for the PJM Region required pursuant to RAA, Schedule 4.1, as approved by the PJM Board.

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.

PJMSettlement:

"PJM Settlement" or "PJM Settlement, Inc." shall mean PJM Settlement, Inc. (or its successor), established by PJM as set forth in Operaitng Agreement, section 3.3.

PJM Tariff, Tariff, O.A.T.T., OATT or PJM Open Access Transmission Tariff:

"PJM Tariff," "Tariff," "O.A.T.T.," "OATT," or "PJM Open Access Transmission 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.

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 mean the 12 moths beginning June 1 and extending through May 31 of the following year, or such other period approved by the Members Committee.

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 Operating Agreement, Schedule 1, section 8 and the parallel provisions of Tariff, Attachment K-Appendix, section 8.

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 *Economic Load Response Participant r*esources 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 *demand for Primary Reserves* in a Reserve Zone or Reserve Sub-zone*,* as *defined by the Operating Reserve Demand Curve for* Primary Reserve*. The requirement can be satisfied by any combination of Synchronized Reserve or Non-Synchronized Reserve resources*.

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 RAA, Article I 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.

Provisional Interconnection Service:

"Provisional Interconnection Service" shall mean interconnection service provided by Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to Transmission Provider's Transmission System and enabling that Transmission System to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Interconnection Service Agreement and, if applicable, the Tariff.

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.

Definitions – R - S

Ramping Capability:

"Ramping Capability" shall mean the sustained rate of change of generator output, in megawatts per minute.

Real-time Congestion Price:

"Real-time Congestion Price" shall mean the Congestion Price resulting from the Office of the Interconnection's dispatch of the PJM Interchange Energy Market in the Operating Day.

Real-time Loss Price:

"Real-time Loss Price" shall mean the Loss Price resulting from the Office of the Interconnection's dispatch of the PJM Interchange Energy Market in the Operating Day.

Real-time Energy Market:

"Real-time Energy Market" shall mean the purchase or sale of energy and payment of Transmission Congestion Charges for quantity deviations from the Day-ahead Energy Market in the Operating Day.

Real-time Offer:

"Real-time Offer" shall mean a new offer or an update to a Market Seller's existing cost-based or market-based offer for a clock hour, submitted for use after the close of the Day-ahead Energy Market.

Real-time Prices:

"Real-time Prices" shall mean the Locational Marginal Prices resulting from the Office of the Interconnection's dispatch of the PJM Interchange Energy Market in the Operating Day.

Real-time Settlement Interval:

"Real-time Settlement Interval" shall mean the interval used by settlements, which shall be every five minutes.

Real-time System Energy Price:

"Real-time System Energy Price" shall mean the System Energy Price resulting from the Office of the Interconnection's dispatch of the PJM Interchange Energy Market in the Operating Day.

Reasonable Efforts:

"Reasonable Efforts" shall mean, with respect to any action required to be made, attempted, or taken by an Interconnection Party or by a Construction Party under Tariff, Part IV or Part VI, an Interconnection Service Agreement, or a Construction Service Agreement, such efforts as are timely and consistent with Good Utility Practice and with efforts that such party would undertake for the protection of its own interests.

Receiving Party:

"Receiving Party" shall mean the entity receiving the capacity and energy transmitted by the Transmission Provider to Point(s) of Delivery.

Referral:

"Referral" shall mean a formal report of the Market Monitoring Unit to the Commission for investigation of behavior of a Market Participant, of behavior of PJM, or of a market design flaw, pursuant to Tariff, Attachment M, section IV.I.

Reference Resource:

"Reference Resource" shall mean a combustion turbine generating station, configured with a *single* General Electric Frame *7HA* turbine with *evaporative cooling*, Selective Catalytic Reduction technology all CONE Areas, dual fuel capability, and a heat rate of 9*.134* Mmbtu/ MWh.

Regional Entity:

"Regional Entity" shall have the same meaning specified in the Operating Agreement.

Regional Transmission Expansion Plan:

"Regional Transmission Expansion Plan" shall mean the plan prepared by the Office of the Interconnection pursuant to Operating Agreement, Schedule 6 for the enhancement and expansion of the Transmission System in order to meet the demands for firm transmission service in the PJM Region.

Regional Transmission Group (RTG):

"Regional Transmission Group" or "RTG" shall mean a voluntary organization of transmission owners, transmission users and other entities approved by the Commission to efficiently coordinate transmission planning (and expansion), operation and use on a regional (and interregional) basis.

Regulation:

"Regulation" shall mean the capability of a specific generation resource or Demand Resource with appropriate telecommunications, control and response capability to separately increase and

decrease its output or adjust load in response to a regulating control signal, in accordance with the specifications in the PJM Manuals.

Regulation Zone:

"Regulation Zone" shall mean any of those one or more geographic areas, each consisting of a combination of one or more Control Zone(s) as designated by the Office of the Interconnection in the PJM Manuals, relevant to provision of, and requirements for, regulation service.

Relevant Electric Retail Regulatory Authority:

"Relevant Electric Retail Regulatory Authority" shall mean an entity that has jurisdiction over and establishes prices and policies for competition for providers of retail electric service to end-customers, such as the city council for a municipal utility, the governing board of a cooperative utility, the state public utility commission or any other such entity.

Reliability Assurance Agreement or PJM Reliability Assurance Agreement:

"Reliability Assurance Agreement" or " PJM Reliability Assurance Agreement" shall mean that certain Reliability Assurance Agreement Among Load Serving Entities in the PJM Region, on file with FERC as PJM Interconnection L.L.C. Rate Schedule FERC No. 44, and as amended from time to time thereafter.

Reliability Pricing Model Auction:

"Reliability Pricing Model Auction" or "RPM Auction" shall mean the Base Residual Auction or any Incremental Auction, or, for the 2016/2017 and 2017/2018 Delivery Years, any Capacity Performance Transition Incremental Auction.

Required Transmission Enhancements:

"Regional Transmission Enhancements" shall mean enhancements and expansions of the Transmission System that (1) a Regional Transmission Expansion Plan developed pursuant to Operating Agreement, Schedule 6 or (2) any joint planning or coordination agreement between PJM and another region or transmission planning authority set forth in Tariff, Schedule 12-Appendix B ("Appendix B Agreement") designates one or more of the Transmission Owner(s) to construct and own or finance. Required Transmission Enhancements shall also include enhancements and expansions of facilities in another region or planning authority that meet the definition of transmission facilities pursuant to FERC's Uniform System of Accounts or have been classified as transmission facilities in a ruling by FERC addressing such facilities constructed pursuant to an Appendix B Agreement cost responsibility for which has been assigned at least in part to PJM pursuant to such Appendix B Agreement.

Reserved Capacity:

"Reserved Capacity" shall mean the maximum amount of capacity and energy that the Transmission Provider agrees to transmit for the Transmission Customer over the Transmission Provider's Transmission System between the Point(s) of Receipt and the Point(s) of Delivery under Tariff, Part II. Reserved Capacity shall be expressed in terms of whole megawatts on a sixty (60) minute interval (commencing on the clock hour) basis.

Reserve Penalty Factor:

"Reserve Penalty Factor" shall mean the *maximum production* cost, in $/MWh, *willing to be incurred to meet the Minimum Primary Reserve Requirement, Minimum Synchronized Reserve Requirement, or Minimum 30-minute Reserve Requirement for* a *given* Reserve Zone or Reserve Sub-zone*, as specified by the applicable Operating Reserve Demand Curve.*

Reserve Sub-zone:

"Reserve Sub-zone" shall mean any of those geographic areas wholly contained within a Reserve Zone, consisting of a combination of a portion of one or more Control Zone(s) as designated by the Office of the Interconnection in the PJM Manuals, relevant to provision of, and requirements for, reserve service.

Reserve Zone:

"Reserve Zone" shall mean any of those geographic areas consisting of a combination of one or more Control Zone(s), as designated by the Office of the Interconnection in the PJM Manuals, relevant to provision of, and requirements for, reserve service.

Residual Auction Revenue Rights:

"Residual Auction Revenue Rights" shall mean incremental stage 1 Auction Revenue Rights created within a Planning Period by an increase in transmission system capability, including the return to service of existing transmission capability, that was not modeled pursuant to Operating Agreement, Schedule 1, section 7.5 and the parallel provisions of Tariff, Attachment K-Appendix, section 7.5 in compliance with Operating Agreement, Schedule 1, section 7.4.2 (h) and the parallel provisions of Tariff, Attachment K-Appendix, section 7.4.2(h), and, if modeled, would have increased the amount of stage 1 Auction Revenue Rights allocated pursuant to Operating Agreement, Schedule 1, section 7.4.2 and the parallel provisions of Tariff, Attachment K-Appendix, section 7.4.2; provided that, the foregoing notwithstanding, Residual Auction Revenue Rights shall exclude: 1) Incremental Auction Revenue Rights allocated pursuant to Tariff, Part VI; and 2) Auction Revenue Rights allocated to entities that are assigned cost responsibility pursuant to Operating Agreement, Schedule 6 for transmission upgrades that create such rights.

Residual Metered Load:

"Residual Metered Load" shall mean all load remaining in an electric distribution company's fully metered franchise area(s) or service territory(ies) after all nodally priced load of entities serving load in such area(s) or territory(ies) has been carved out.

Resource Substitution Charge:

"Resource Substitution Charge" shall mean a charge assessed on Capacity Market Buyers in an Incremental Auction to recover the cost of replacement Capacity Resources.

Revenue Data for Settlements:

"Revenue Data for Settlements" shall mean energy quantities used in accounting and billing as determined pursuant to Tariff, Attachment K-Appendix and the corresponding provisions of Operating Agreement, Schedule 1.

RPM Seller Credit:

"RPM Seller Credit" shall mean an additional form of Unsecured Credit defined in Tariff, Attachment Q, section IV.

Scheduled Incremental Auctions:

"Scheduled Incremental Auctions" shall refer to the First, Second, or Third Incremental Auction.

Schedule of Work:

"Schedule of Work" shall mean that schedule attached to the Interconnection Construction Service Agreement setting forth the timing of work to be performed by the Constructing Entity pursuant to the Interconnection Construction Service Agreement, based upon the Facilities Study and subject to modification, as required, in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals.

Scope of Work:

"Scope of Work" shall mean that scope of the work attached as a schedule to the Interconnection Construction Service Agreement and to be performed by the Constructing Entity(ies) pursuant to the Interconnection Construction Service Agreement, provided that such Scope of Work may be modified, as required, in accordance with Transmission Provider's scope change process for interconnection projects set forth in the PJM Manuals.

Seasonal Capacity Performance Resource:

"Seasonal Capacity Performance Resource" shall have the same meaning specified in Tariff, Attachment DD, section 5.5A.

Secondary Reserve:

"Secondary Reserve" shall mean the reserve capability of generation resources that can be converted fully into energy or Economic Load Response Participant resources whose demand can be reduced within 30 minutes (less the capability of such resources to provide Primary Reserve), from the request of the Office of the Interconnection, regardless of whether the equipment providing the reserve is electrically synchronized to the Transmission System or not.

Secondary Systems:

"Secondary Systems" shall mean control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers.

Second Incremental Auction:

"Second Incremental Auction" shall mean an Incremental Auction conducted ten months before the Delivery Year to which it relates**.**

Security:

"Security" shall mean the security provided by the New Service Customer pursuant to Tariff, section 212.4 or Tariff, Part VI, section 213.4 to secure the New Service Customer's responsibility for Costs under the Interconnection Service Agreement or Upgrade Construction Service Agreement and Tariff, Part VI, section 217.

Segment:
"Segment" shall have the same meaning as described in Operating Agreement, Schedule 1, section 3.2.3(e).

Self-Supply:

"Self-Supply" shall mean Capacity Resources secured by a Load-Serving Entity, by ownership or contract, outside a Reliability Pricing Model Auction, and used to meet obligations under this Attachment or the Reliability Assurance Agreement through submission in a Base Residual Auction or an Incremental Auction of a Sell Offer indicating such Market Seller's intent that such Capacity Resource be Self-Supply. Self-Supply may be either committed regardless of clearing price or submitted as a Sell Offer with a price bid. A Load Serving Entity's Sell Offer with a price bid for an owned or contracted Capacity Resource shall not be deemed "Self-Supply," unless it is designated as Self-Supply and used by the LSE to meet obligations under this Attachment or the Reliability Assurance Agreement.

Sell Offer:

"Sell Offer" shall mean an offer to sell Capacity Resources in a Base Residual Auction, Incremental Auction, or Reliability Backstop Auction.

Service Agreement:

"Service Agreement" shall mean the initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the Transmission Provider for service under the Tariff.

Service Commencement Date:

"Service Commencement Date" shall mean the date the Transmission Provider begins to provide service pursuant to the terms of an executed Service Agreement, or the date the Transmission Provider begins to provide service in accordance with Tariff, Part II, section 15.3 or Tariff, Part III, section 29.1.

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

"Short-Term Firm Point-To-Point Transmission Service" shall mean Firm Point-To-Point Transmission Service under Tariff, Part II with a term of less than one year.

Short-term Project:

"Short-term Project" shall have the same meaning provided in the Operating Agreement.

Short-Term Resource Procurement Target:

"Short-Term Resource Procurement Target" shall mean, for Delivery Years through May 31, 2018, as to the PJM Region, for purposes of the Base Residual Auction, 2.5% of the PJM Region Reliability Requirement determined for such Base Residual Auction, for purposes of the First Incremental Auction, 2% of the of the PJM Region Reliability Requirement as calculated at the time of the Base Residual Auction; and, for purposes of the Second Incremental Auction, 1.5% of the of the PJM Region Reliability Requirement as calculated at the time of the Base Residual Auction; and, as to any Zone, an allocation of the PJM Region Short-Term Resource Procurement Target based on the Preliminary Zonal Forecast Peak Load, reduced by the amount of load served under the FRR Alternative. For any LDA, the LDA Short-Term Resource Procurement Target shall be the sum of the Short-Term Resource Procurement Targets of all Zones in the LDA.

Short-Term Resource Procurement Target Applicable Share:

"Short-Term Resource Procurement Target Applicable Share" shall mean, for Delivery Years through May 31, 2018: (i) for the PJM Region, as to the First and Second Incremental Auctions, 0.2 times the Short-Term Resource Procurement Target used in the Base Residual Auction and, as to the Third Incremental Auction for the PJM Region, 0.6 times such target; and (ii) for an LDA, as to the First and Second Incremental Auctions, 0.2 times the Short-Term Resource Procurement Target used in the Base Residual Auction for such LDA and, as to the Third Incremental Auction, 0.6 times such target.

Site:

"Site" shall mean all of the real property, including but not limited to any leased real property and easements, on which the Customer Facility is situated and/or on which the Customer Interconnection Facilities are to be located.

Small Commercial Customer:

"Small Commercial Customer," as used in RAA, Schedule 6 and Tariff, Attachment DD-1, shall mean a commercial retail electric end-use customer of an electric distribution company that participates in a mass market demand response program under the jurisdiction of a RERRA and satisfies the definition of a "small commercial customer" under the terms of the applicable RERRA's program, provided that the customer has an annual peak demand no greater than 100kW.

Small Generation Resource:

"Small Generation Resource" shall mean an Interconnection Customer's device of 20 MW or less for the production and/or storage for later injection of electricity identified in an Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities. This term shall include Energy Storage Resources and/or other devices for storage for later injection of energy.

Small Inverter Facility:

"Small Inverter Facility" shall mean an Energy Resource that is a certified small inverter-based facility no larger than 10 kW.

Small Inverter ISA:

"Small Inverter ISA" shall mean an agreement among Transmission Provider, Interconnection Customer, and Interconnected Transmission Owner regarding interconnection of a Small Inverter Facility under Tariff, Part IV, section 112B.

Special Member:

"Special Member" shall mean an entity that satisfies the requirements of Operating Agreement, Schedule 1, section 1.5A.02, and the parallel provisions of Tariff, Attachment K-Appendix, section 1.5A.02, or the special membership provisions established under the Emergency Load Response and Pre-Emergency Load Response Programs.

Spot Market Backup:

"Spot Market Backup" shall mean the purchase of energy from, or the delivery of energy to, the PJM Interchange Energy Market in quantities sufficient to complete the delivery or receipt obligations of a bilateral contract that has been curtailed or interrupted for any reason.

Spot Market Energy:

"Spot Market Energy" shall mean energy bought or sold by Market Participants through the PJM Interchange Energy Market at System Energy Prices determined as specified in Operating Agreement, Schedule 1, section 2, and the parallel provisions of Tariff, Attachment K-Appendix, section 2.

Start Additional Labor Costs:

"Start Additional Labor Costs" shall mean additional labor costs for startup required above normal station manning levels.

Start-Up Costs:

"Start-Up Costs" shall mean the unit costs to bring the boiler, turbine and generator from shutdown conditions to the point after breaker closure which is typically indicated by telemetered or aggregated state estimator megawatts greater than zero and is determined based on the cost of start fuel, total fuel-related cost, performance factor, electrical costs (station service), start maintenance adder, and additional labor cost if required above normal station manning. Start-Up Costs can vary with the unit offline time being categorized in three unit temperature conditions: hot, intermediate and cold.

State:

"State" shall mean the District of Columbia and any State or Commonwealth of the United States.

State Commission:

"State Commission**"** shall mean any state regulatory agency having jurisdiction over retail electricity sales in any State in the PJM Region.

State Estimator:

"State Estimator" shall mean the computer model of power flows specified in Operating Agreement, Schedule 1, section 2.3 and the parallel provisions of Tariff, Attachment K-Appendix, section 2.3.

Station Power:

"Station Power" shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Region or for the heating, lighting, air-conditioning and

office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy (i) used to power synchronous condensers; (ii) used for pumping at a pumped storage facility; (*iii*) used in association with restoration or black start service*; or (iv) that is Direct Charging Energy*.

Sub-Annual Resource Constraint:

"Sub-Annual Resource Constraint" shall mean, for the 2017/2018 Delivery Year and for FRR Capacity Plans the 2017/2018 and 2018/2019 Delivery Years, for the PJM Region or for 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 and Extended Summer Demand Resources for the 2017/2018 Delivery Year in the PJM Region or in such LDA, calculated as the Sub-Annual Resource Reliability Target for the PJM Region or for such LDA, respectively, minus the Short-Term Resource Procurement Target for the PJM Region or for such LDA, respectively.

Sub-Annual Resource Price Decrement:

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

Sub-Annual Resource Reliability Target:

"Sub-Annual Reliability Target" for the PJM Region or an LDA, shall mean the maximum amount of the combination of Extended Summer Demand Resources and Limited Demand Resources in Unforced Capacity determined by PJM to be consistent with the maintenance of reliability, stated in Unforced Capacity, that shall be used to calculate the Minimum Annual Resource Requirement for Delivery Years through May 31, 2017 and the Sub-Annual Resource Constraint for the 2017/2018 and 2018/2019 Delivery Years. As more fully set forth in the PJM Manuals, PJM calculates the Sub-Annual Resource Reliability Target, by first determining a reference annual loss of load expectation ("LOLE") assuming no Demand Resources. The calculation for the unconstrained portion of the PJM Region uses a daily distribution of loads under a range of weather scenarios (based on the most recent load forecast and iteratively shifting the load distributions to result in the Installed Reserve Margin established for the Delivery Year in question) and a weekly capacity distribution (based on the cumulative capacity availability distributions developed for the Installed Reserve Margin study for the Delivery Year in question). The calculation for each relevant LDA uses a daily distribution of loads under a range of weather scenarios (based on the most recent load forecast for the Delivery Year in question) and a weekly capacity distribution (based on the cumulative capacity availability distributions developed for the Capacity Emergency Transfer Objective study for the Delivery Year in question). For the relevant LDA calculation, the weekly capacity distributions are adjusted to reflect the Capacity Emergency Transfer Limit for the Delivery Year in question.

For both the PJM Region and LDA analyses, PJM then models the commitment of varying amounts of DR (displacing otherwise committed generation) as interruptible from May 1 through October 31 and unavailable from November 1 through April 30 and calculates the LOLE at each DR level. The Extended Summer DR Reliability Target is the DR amount, stated as a percentage of the unrestricted peak load, that produces no more than a ten percent increase in the LOLE, compared to the reference value. The Sub-Annual 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].

Sub-meter:

"Sub-meter" shall mean a metering point for electricity consumption that does not include all electricity consumption for the end-use customer as defined by the electric distribution company account number. PJM shall only accept sub-meter load data from end-use customers for measurement and verification of Regulation service as set forth in the Economic Load Response rules and PJM Manuals.

Summer-Period Capacity Performance Resource:

"Summer-Period Capacity Performance Resource" shall have the same meaning specified in Tariff, Attachment DD, section 5.5A.

Surplus Interconnection Service:

"Surplus Interconnection Service" shall mean any unneeded portion of Interconnection Service established in an Interconnection Service Agreement, such that if Surplus Interconnection Service is utilized, the total amount of Interconnection Service at the Point of Interconnection would remain the same.

Switching and Tagging Rules:

"Switching and Tagging Rules" shall mean the switching and tagging procedures of Interconnected Transmission Owners and Interconnection Customer as they may be amended from time to time.

Synchronized Reserve:

"Synchronized Reserve" shall mean the reserve capability of generation resources that can be converted fully into energy or *Economic Load Response Participant r*esources whose demand can be reduced within ten minutes from the request of the Office of the Interconnection dispatcher, and is provided by equipment that is electrically synchronized to the Transmission System.

Synchronized Reserve Event:

"Synchronized Reserve Event" shall mean a request from the Office of the Interconnection to generation resources and/or *Economic Load Response Participant r*esources able, assigned or self-scheduled to provide Synchronized Reserve in one or more specified Reserve Zones or Reserve Sub-zones, within ten minutes, to increase the energy output or reduce load by the amount of assigned or self-scheduled Synchronized Reserve capability.

Synchronized Reserve Requirement:

"Synchronized Reserve Requirement" shall mean the *demand for Synchronized Reserve* in a Reserve Zone or Reserve Sub-zone*, as defined by the Operating Reserve Demand Curve for* Synchronized Reserve *resources. The requirement can only be satisfied by Synchronized Reserve resources*.

System Condition:

"System Condition" shall mean a specified condition on the Transmission Provider's system or on a neighboring system, such as a constrained transmission element or flowgate, that may trigger Curtailment of Long-Term Firm Point-to-Point Transmission Service using the curtailment priority pursuant to Tariff, Part II, section 13.6. Such conditions must be identified in the Transmission Customer's Service Agreement.

System Energy Price:

"System Energy Price" shall mean the energy component of the Locational Marginal Price, which is the price at which the Market Seller has offered to supply an additional increment of energy from a resource, calculated as specified in Operating Agreement, Schedule 1, section 2 and the parallel provisions of Tariff, Attachment K-Appendix, section 2.

System Impact Study:

"System Impact Study" shall mean an assessment by the Transmission Provider of (i) the adequacy of the Transmission System to accommodate a Completed Application, an Interconnection Request or an Upgrade Request, (ii) whether any additional costs may be incurred in order to provide such transmission service or to accommodate an Interconnection Request, and (iii) with respect to an Interconnection Request, an estimated date that an Interconnection Customer's Customer Facility can be interconnected with the Transmission System and an estimate of the Interconnection Customer's cost responsibility for the interconnection; and (iv) with respect to an Upgrade Request, the estimated cost of the requested system upgrades or expansion, or of the cost of the system upgrades or expansion, necessary to provide the requested incremental rights.

System Protection Facilities:

"System Protection Facilities" shall refer to the equipment required to protect (i) the Transmission System, other delivery systems and/or other generating systems connected to the

Transmission System from faults or other electrical disturbance occurring at or on the Customer Facility, and (ii) the Customer Facility from faults or other electrical system disturbance occurring on the Transmission System or on other delivery systems and/or other generating systems to which the Transmission System is directly or indirectly connected. System Protection Facilities shall include such protective and regulating devices as are identified in the Applicable Technical Requirements and Standards or that are required by Applicable Laws and Regulations or other Applicable Standards, or as are otherwise necessary to protect personnel and equipment and to minimize deleterious effects to the Transmission System arising from the Customer Facility.

12.1 Internal Dispute Resolution Procedures:

Any dispute between a Transmission Customer or New Service Customer, an affected Transmission Owner, or the Transmission Provider involving transmission or interconnection service under the Tariff (excluding applications for rate changes or other changes to the Tariff, or to any Service Agreement entered into under the Tariff, which shall be presented directly to the Commission for resolution) shall be referred to a designated senior representative of each of the parties to the dispute for resolution on an informal basis as promptly as practicable. In the event the designated representatives are unable to resolve the dispute within thirty (30) days (or such other period as the parties to the dispute may agree upon) by mutual agreement, such dispute may be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below.

12.2 External Arbitration Procedures:

Any arbitration initiated under the Tariff shall be conducted before a single neutral arbitrator appointed by the parties to the dispute. If the parties to the dispute fail to agree upon a single arbitrator within ten (10) days of the referral of the dispute to arbitration, the party or parties to the dispute demanding arbitration shall choose one arbitrator and the party or parties responding to the demand for arbitration shall choose another arbitrator, each of whom shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the parties to the dispute an opportunity to be heard and, except as otherwise provided herein, shall generally conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association and any applicable Commission regulations.

36.1 General:

Generation Interconnection Requests and Transmission Interconnection Requests shall be governed by Tariff, Part IV, Subpart A, section 36.

36.1.01 Generation Interconnection Request:

Except as otherwise provided in this Subpart A with respect to Behind The Meter Generation, an Interconnection Customer that seeks to interconnect new generation in, to increase the capacity of generation already interconnected in, or request Surplus Interconnection Service in the PJM Region shall submit to the Transmission Provider a Generation Interconnection Request. The Transmission Provider shall acknowledge receipt of the Generation Interconnection Request (electronically when available to all parties, otherwise written) within five Business Days after receipt of the request and shall attach a copy of the received Generation Interconnection Request to the Transmission Provider's acknowledgment.

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

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

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

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

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

    e. a description of the equipment configuration, and a set of preliminary electrical design specifications, and, if the generating unit is a wind generation facility, then the set of preliminary electrical design

specifications must depict the wind plant as a single equivalent generator; and

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

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

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

i. Deposit.

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

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

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

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

Request is received in the sixth calendar month of the current New Services Queue.

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

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

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

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

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

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

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

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

(4) If the Generation Interconnection Request is deemed to be modified (pursuant to Tariff, Part IV, Subpart A, section 36.2A), rejected, terminated and/or withdrawn during the

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

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

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

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

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

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

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

(2) Any outstanding monies owed by the Interconnection Customer in connection with outstanding invoices related to prior Generation Interconnection Requests by the Interconnection Customer.

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

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

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

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

k. Indication whether the Interconnection Customer is requesting Surplus Interconnection Service; and, if so, identification of the specific, existing Generating Facility providing Surplus Interconnection Service, including whether the Interconnection Customer requesting Surplus Interconnection Service is the owner or affiliate of the existing Generating Facility. If a third party, must include evidence of permission from the existing owner of the Generating Facility to utilize the existing Generating Facility's Surplus Interconnection Service must be submitted with this request.

2. Deficiency Review. Within five Business Days of the Interconnection Customer submitting a Generation Interconnection Request, Transmission Provider shall provide a deficiency review of the Generation Interconnection Request to determine whether the Interconnection Customer submitted a valid Generation Interconnection Request.

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

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

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

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

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

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

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

study costs within ten Business Days of Transmission Provider sending the Interconnection Customer notification of such estimated additional study costs, then the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

c. If there are deficiencies in the Generation Interconnection Request for any of the requirements set forth above, the Transmission Provider shall notify the Interconnection Customer (electronically when available to all parties, otherwise written) within five Business Days of receipt of the Generation Interconnection Request that such Generation Interconnection Request is deficient. This notification is referred to as a deficiency notice.

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

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

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

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

iii. Without regard to the timing of the Interconnection Customer's deficiency response period, the Transmission Provider shall have an additional five Business Days to review each Interconnection Customer's response to the deficiency notice. If the Generation Interconnection Request is still deficient after the Transmission Provider's additional five Business Day review and the full ten Business Days of the Interconnection Customer's deficiency response period have expired, the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

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

Transmission Provider's deficiency notice), the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

3. Any Queue Position for which an Interconnection Customer has not cleared the deficiencies before the close of the relevant New Services Queue shall be deemed to be terminated and withdrawn, even if the deficiency response period for such Queue Position does not expire until after the close of the relevant New Services Queue.

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

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

6. Transmission Provider Website Postings.

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

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

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

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

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

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

      vi. the type of Generation Interconnection Service requested;

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

      viii. the date of the Generation Interconnection Request;

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

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

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

36.1.02 Generation Interconnection Requests of 20 Megawatts or Less:

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

36.1.03 Transmission Interconnection Request:

An Interconnection Customer that seeks to interconnect or add Merchant Transmission Facilities to the Transmission System, or to increase the capacity of existing Merchant Transmission Facilities interconnected with the Transmission System shall submit to the Transmission Provider a Transmission Interconnection Request. The Transmission Provider shall acknowledge receipt of the Transmission Interconnection Request (electronically when available to all parties, otherwise written) within five Business Days after receipt of the request and shall attach a copy of the received Transmission Interconnection Request to the Transmission Provider's acknowledgment.

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

a. the location of the proposed Merchant Transmission Facilities and of the substation(s) or other location(s) where the Transmission Interconnection Customer proposes to interconnect or add its Merchant Transmission Facilities to the Transmission System; and

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

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

d. the planned date the proposed Merchant Transmission Facilities will be in service, such date to be no more than seven years from the date the request is received by the Transmission Provider, unless the Transmission Interconnection Customer demonstrates that engineering, permitting, and construction of the Merchant Transmission Facilities will take more than seven years; and

e. if the request relates to proposed Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities that will interconnect with the Transmission System and with another control area outside the PJM Region, the Transmission Interconnection Customer's election to receive either; and

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

    ii. Incremental Deliverability Rights, Incremental Auction Revenue Rights, Incremental Capacity Transfer Rights, and Incremental Available Transfer Capability Revenue Rights, associated with the capability of the proposed Merchant D.C. Transmission Facilities and/or Controllable A.C. Merchant Transmission Facilities;

f. if the Transmission Interconnection Customer will be eligible to receive Incremental Deliverability Rights under Tariff, Part VI, Subpart C, section 235, identification of the point on the Transmission System where the Transmission Interconnection Customer wishes to receive Incremental Deliverability Rights created by the construction or installation of its proposed Merchant Transmission Facilities; and

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

h. Deposit.

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

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

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

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

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

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

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

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

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

refundable portion of each total deposit amount to cover the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2. Deficiency Review. Within five Business Days of the Interconnection Customer submitting a Transmission Interconnection Request, the Transmission Provider shall provide a deficiency review of the Transmission Interconnection Request to determine whether the Interconnection Customer submitted a valid Transmission Interconnection Request.

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

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

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

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

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

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

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

estimated additional study costs, then the Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

c. If there are deficiencies in the Transmission Interconnection Request for any of the requirements set forth above, the Transmission Provider shall notify the Interconnection Customer (electronically when available to all parties, otherwise written) within five Business Days of receipt of the Transmission Interconnection Request that such Transmission Interconnection Request is deficient. This notification is referred to as a deficiency notice.

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

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

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

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

iii. Without regard to the timing of the Interconnection Customer's deficiency response period, the Transmission Provider shall have an additional five Business Days to review the Interconnection Customer's response to the deficiency notice. If the Transmission Interconnection Request is still deficient after the Transmission Provider's additional five Business Day review and the full ten Business Days of the Interconnection Customer's deficiency response period have expired, the Transmission Interconnection Request shall be deemed to be terminated and withdrawn.

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

Interconnection Request shall be deemed to be terminated and withdrawn.

3. Any Queue Position for which an Interconnection Customer has not cleared the deficiencies before the close of the relevant New Services Queue shall be deemed to be terminated and withdrawn, even if the deficiency response period for such Queue Position does not expire until after the close of the relevant New Services Queue.

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

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

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

7. Transmission Provider Website Postings.

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

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

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

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

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

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

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

vii. the date of the Transmission Interconnection Request;

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

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

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

36.1.03A Transmission Interconnection Customers Requesting Merchant Network Upgrades

Notwithstanding section 36.1.03 above, an Interconnection Customer that proposes Merchant Network Upgrades (including advancing pursuant to Tariff, Part VI, Subpart B, section 220 or accelerating the construction of any transmission enhancement or expansion, other than Merchant Transmission Facilities, that is included in the Regional Transmission Expansion Plan prepared pursuant to Operating Agreement, Schedule 6) shall submit an Upgrade Request, with the required information and the required deposit for a System Impact Study, as set forth in Tariff, Attachment EE.

36.1.1 Interconnection Services for Generation:

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

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

36.1.1A Service Below Generating Capability

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

36.1.1B Surplus Interconnection Service

Requests for Surplus Interconnection Service may be made by the existing Interconnection Customer whose Generating Facility is already interconnected, or one of its affiliates, or by an unaffiliated Interconnection Customer. The existing Interconnection Customer or one of its affiliates has priority to use this service; however, if they do not exercise this priority, Surplus Interconnection Service requests also may be made available to an unaffiliated Interconnection Customer. Surplus Interconnection Service is limited to utilizing or transferring an existing Generating Facility's Surplus Interconnection Service at the pre-existing Point of Interconnection of the existing Generating Facility and cannot exceed the existing Generating Facility's total amount of Interconnection Service, i.e., the total amount of Interconnection Service used by the Generating Facility requesting Surplus Interconnection Service and the existing Generating Facility shall not exceed the lesser of the Maximum Facility Output stated in the existing Generating Facility's Interconnection Service Agreement or the total "as-built capability" of the existing Generating Facility. If the Generating Facility requests Surplus Interconnection Service associated with an existing Generating Facility that is an Energy Resource, the Generating Facility requesting the Surplus Interconnection Service shall be an Energy Resource; and if the existing Generating Facility is a Capacity Resource, the Generating Facility requesting Surplus Interconnection Service associated with the Generating Facility may be an Energy Resource or a Capacity Resource (up to the amount of Capacity Interconnection Rights granted the existing

Generating Facility). Surplus Interconnection Service cannot be granted if doing so would require new Network Upgrades or would have additional impacts affecting the determination of what Network Upgrades would be necessary to New Service Customers already in the interconnection queue.

36.1.2 No Applicability to Transmission Service:

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

36.1.3 [Reserved]

36.1.4 [Reserved]

36.1.5 Scoping Meeting:

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

36.1.6 Coordination with Affected Systems:

The Transmission Provider will coordinate with Affected System Operators the conduct of any required studies in accordance with Tariff, Part VI, Subpart A, section 202.

36.1.7 Base Case Data:

Transmission Provider shall maintain base case power flow, short circuit and stability databases, including all underlying assumptions, and contingency list on a password-protected website, subject to the confidentiality provisions of Tariff, Part VI, Subpart B, section 223. In addition, Transmission Provider shall maintain base case power flows and underlying assumptions on a password-protected website. Such base case power flows and underlying assumptions should reasonably represent those used during the most recent interconnection study. Transmission Provider may require Interconnection Customers and password-protected website users to sign any required confidentiality agreement(s) before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects, that are included in the then-current, approved Regional Transmission Expansion Plan.

36.1A Behind The Meter Generation:

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

36.1A.1 Generation Interconnection Requests:

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

36.1A.2 Information Required in Generation Interconnection Requests:

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

36.1A.3 Small Generation Classification:

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

36.1A.4 Transmission Provider Determination:

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

36.1A.5 Treatment As Energy Resource:

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

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

36.1A.6 Operation as Capacity Resource:

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

36.1A.7 Other Requirements:

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

36.2 Interconnection Feasibility Study:

After receiving an Interconnection Request, except for a request for Surplus Interconnection Service, a signed Generation Interconnection Feasibility Study Agreement or Transmission Interconnection Feasibility Study Agreement, as applicable, and the applicable deposit contained in Tariff, Part IV, Subpart A, section 36.1.01, Tariff, Part IV, Subpart A, section 36.1.03, Tariff, Part IV, Subpart G, section 110.1, Tariff, Part IV, Subpart G, section 111.1, and Tariff, Part IV, Subpart G, section 112.1 from the Interconnection Customer, and, if applicable, subject to the terms of Tariff, Part IV, Subpart A, section 36.1A.5, the Transmission Provider shall conduct an Interconnection Feasibility Study to make a preliminary determination of the type and scope of Attachment Facilities, Local Upgrades, and Network Upgrades that will be necessary to accommodate the Interconnection Request and to provide the Interconnection Customer a preliminary estimate of the time that will be required to construct any necessary facilities and upgrades and the Interconnection Customer's cost responsibility, estimated consistent with Tariff, Part VI, Subpart B, section 217. The Interconnection Feasibility Study assesses the practicality and cost of accommodating interconnection of the generating unit or increased generating capacity with the Transmission System. The analysis is limited to load-flow analysis of probable contingencies and, for Generation Interconnection Requests, short-circuit studies. This study also focuses on determining preliminary estimates of the type, scope, cost and lead time for construction of facilities required to interconnect the project. For a Generation Interconnection Customer, the Interconnection Feasibility Study may provide separate estimates of necessary facilities and upgrades and associated cost responsibility reflecting the Generating Facility being designated as either a Capacity Resource or an Energy Resource. Transmission Provider shall study the Interconnection Request at the level of service requested by the Interconnection Customer, unless otherwise required to study the full electrical generating capability of the Generating Facility due to safety or reliability concerns. For purposes of determining necessary interconnection facilities and network upgrades, the Feasibility Study shall consider the level of Interconnection Service requested by the Interconnection Customer, unless otherwise required to study the full electrical generating capability of the Generating Facility due to safety or reliability concerns. The Feasibility Study will also identify all control equipment identified as necessary for requests for Interconnection Service that are lower than the full electrical generating capability of the Generating Facility. The study for the primary Point of Interconnection will be conducted as a cluster, within the project's New Services Queue. The study for the secondary Point of Interconnection will be conducted as a sensitivity analysis. The Transmission Provider shall provide a copy of the Interconnection Feasibility Study and, to the extent consistent with the Office of the Interconnection's confidentiality obligations in Operating Agreement, section 18.17, related work papers to the Interconnection Customer and the affected Transmission Owner(s). Upon completion, the Transmission Provider shall list the study and the date of the Interconnection Request to which it pertains on the Transmission Provider's website. To the extent required by Commission regulations, the Transmission Provider shall make the completed Interconnection Feasibility Study publicly available upon request, except that the identity of the Interconnection Customer shall remain confidential. The Transmission Provider shall conduct Interconnection Feasibility Studies two times each year.

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

For Interconnection Requests received during the six-month period ending October 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by the last day of February. For Interconnection Requests received during the six-month period ending April 30 the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by August 31. Following the closure of an interconnection queue on October 31 and April 30, the Transmission Provider will utilize the following one month period to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on December 1 and June 1, respectively. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

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

For Interconnection Requests received during the five-month period ending March 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by July 31. Following the closure of the relevant New Services Queue on March 31, the Transmission Provider will utilize the following one month period to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on May 1. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

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

For Interconnection Requests received during the six-month period ending September 30, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by January 31. For Interconnection Requests received during the six-month period ending March 31, the Transmission Provider shall use due diligence to complete Interconnection Feasibility Studies by July 31. Following the closure of the relevant New Services Queues on September 30 and March 31, respectively, the Transmission Provider will utilize the following months of October and April, respectively, to conduct any remaining scoping meetings and assemble the necessary analysis models so as to initiate the performance of the Interconnection Feasibility Studies on November 1 and May 1, respectively. In the event that the Transmission Provider is unable to complete an Interconnection Feasibility Study within such time period, it shall so notify the affected Interconnection Customer and the affected Transmission Owner(s) and provide an estimated completion date along with an explanation of the reasons why additional time is needed to complete the study.

36.2.1 Substitute Point:

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

36.2.2 Meeting with Transmission Provider:

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

36.2.3 Surplus Interconnection Services Requests:

a. Feasibility Study. Feasibility Study analyses can generally be expedited by examining a limited contingency set that focuses on the impact of the Interconnection Customer's Surplus Interconnection Service Request for Surplus Interconnection Service on contingency limits in the vicinity of the combined generation resources. Studies for Surplus Interconnection Service shall consist of reactive power, short circuit/fault duty, stability analyses and any other appropriate studies. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied under off-peak conditions. Off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection Service.

b. Once the Feasibility Study is completed and no Network Upgrades are required and there are no impacts affecting the determination of what upgrades are necessary for Interconnection Customers in the interconnection queue, a Feasibility Study report will be prepared and issued to the Interconnection Customer along with an executable Interconnection Service Agreement. Interconnection Customer requesting Interconnection Surplus Service shall execute the Interconnection Service Agreement, request dispute resolution, or request that the Interconnection Service Agreement be filed unexecuted in accordance with Tariff, Part VI, Subpart A, section 212.4.

c. If the Transmission Provider does not or cannot determine from the Feasibility Study whether Network Upgrades will be required or whether there are impacts affecting the determination of what upgrades are necessary for Interconnection Customers in the interconnection queue a Feasibility Study report will be prepared and issued to the Interconnection Customer along with an executable System Impact Study Agreement consistent with Tariff, Part VI, Subpart A, section 204.3

d. Deactivation of Existing Generating Facility

(a) Surplus Interconnection Service cannot be offered if the existing Generating Facility from which Surplus Interconnection Service is provided is deactivated or has submitted

a Notice to Deactivate to Transmission Provider consistent with Tariff, Part V before the Generating Facility requesting Surplus Interconnection Service has commenced commercial operation.

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

i. The Generating Facility receiving Surplus Interconnection Service must have been studied by Transmission Provider for the sole operation at the Point of Interconnection; and

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

(c) If the Interconnection Customer receiving Surplus Interconnection Service cannot satisfy the conditions of section 36.2.3.d(b) above, its Interconnection Service Agreement shall terminate simultaneously with the termination of the Interconnection Service Agreement of the existing Generating Facility from which Surplus Interconnection Service was provided.

36.2A Modification of Interconnection Request:

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

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

36.2A.1.2 After the start of the Feasibility Study, but prior to the return of the executed System Impact Study Agreement to the Transmission Provider, an Interconnection Customer may modify its project to reduce the size of the project as provided in this section 36.2A.1.2, subject to the limitation described in section 36.2A.6 below. The Interconnection Customer may reduce its project by up to 15 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A or capability (in the case of a Transmission Interconnection Request) of the proposed project. For a request to reduce by more than 15 percent, an Interconnection Customer must request the Transmission Provider to evaluate if such a change would be a Material Modification and the Transmission Provider will allow the Interconnection Customer to reduce the size of its project: (i) to any size if the Transmission Provider determines the change is not a Material Modification; or (ii) by up to 60 percent of the electrical generating facility capability or Maximum Facility Output (MW) (in the case of a Generation Interconnection Request), through either (1) a decrease in plant size or (2) a decrease in interconnection service level (consistent with the process described in Tariff, Part IV, Subpart A, section 36.1.1A) or capability (in the case of a Transmission Interconnection Request) if the Transmission Provider determines the change is a Material Modification, however, such a project that falls within this subsection (ii) would be removed from its current Queue Position and will be assigned a new Queue Position at the beginning of the subsequent queue and a new Interconnection Feasibility Study will be performed consistent with the timing of studies for projects submitted in the subsequent queue. All projects assigned such new Queue Positions will retain their priority with respect to each other in their newly assigned queue and with respect to all later queue projects in subsequent queues, but will lose their priority with respect to other projects in the queue to which they were previously assigned. For increases in generating capacity or transmission capability, the Interconnection Customer must submit a new Interconnection Request for the additional capability and shall be assigned a new Queue Position for the additional capability.

36.2A.1.3 Modification of Interconnection Request for Technological Changes

For a request to modify a project to include a technological advancement, no later than the return of the executed System Impact Study Agreement to the Transmission Provider an Interconnection Customer may modify its project submitted in its Interconnection Request to include a technological advancement by including the new data associated with advancements to turbines, inverters, plant supervisory controls or other similar advancements to the existing technology at the same time the Interconnection Customer submits its executed System Impact Study Agreement. The System Impact Study data associated with the requested technological change must be submitted via the PJM website as specified in the PJM Manuals.

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

36.2A.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.

40 Non-Binding Dispute Resolution Procedures:

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

41 Interconnection Study Statistics

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

41.1 Interconnection Feasibility Studies Processing Time:

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

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

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

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

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

41.2 Interconnection System Impact Studies Processing Time:

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

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

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

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

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

41.3 Interconnection Facilities Studies Processing Time:

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

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

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

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

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

41.4 Interconnection Service Requests Withdrawn from Interconnection Queue:

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

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

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

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

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

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

41.5 Posting Requirements

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

41.6 Additional Compliance Requirements

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

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

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

42 – 108 [Reserved.]

205.2 Scope of Studies:

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

205.2.1 Contingent Facilities

Transmission Provider shall identify the Contingent Facilities to be provided to Interconnection Customer in the System Impact Study by reviewing unbuilt Interconnection Facilities and/or Network Upgrades (including those still subject to cost allocation in accordance with the PJM Manuals) associated with another Interconnection Customer with a higher queue priority upon which the Interconnection Customer's cost, timing and study findings are dependent and, if delayed or not built, could cause a need for interconnection restudies of the Interconnection

Request or reassessment of the unbuilt Interconnection Facilities and/or Network Upgrades. Transmission Provider shall include the list of the Contingent Facilities in the System Impact Study, Facilities Study, if applicable, and Interconnection Service Agreement, including why a specific Contingent Facility was identified and how it relates to the Interconnection Request. Transmission Provider shall also provide, upon request of the Interconnection Customer, the estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and non-commercially sensitive.

207 Facilities Study Procedures:

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

212 Interconnection Service Agreement:

Notwithstanding any other provision of the Tariff, this section 212 shall apply only to Interconnection Customers, excluding those that are proposing Merchant Network Upgrades only for which Tariff, Part VI, Subpart B, section 213 shall apply. Upon completion of the Facilities Study (or, if no Facilities Study was required, upon completion of the System Impact Study), the Transmission Provider shall tender to each Interconnection Customer an Interconnection Service Agreement (in the form included in Attachment O to the Tariff) to be executed by the Interconnection Customer, the Interconnected Transmission Owner and the Transmission Provider. The Transmission Provider shall provide the Interconnected Transmission Owner with a copy of the Interconnection Service Agreement when this agreement is provided to the Interconnection Customer for execution. In order to exercise Option to Build, as set forth in Interconnection Construction Service Agreement, Tariff, Attachment P, Appendix 2, section 3.2.3.1, Interconnection Customer must provide Transmission Provider and the Interconnected Transmission Owner with written notice of its election to exercise the option no later than thirty (30) days from the date the Interconnection Customer receives the results of the Facilities Study (or, if no Facilities Study was required, completion of the System Impact Study). Interconnection Customer may not elect Option to Build after such date.

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 Tariff, Part VI, Subpart B, section 217, 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 Interconnection Construction Service Agreement, Tariff, Attachment P, Appendix 2, section 3.2.3.1 , Interconnected Transmission Owner's oversight costs (i.e., costs incurred by the Interconnected 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) associated with the Interconnection Customer building Transmission Owner Attachment Facilities and Direct Connection Network Upgrades, including tie-in work and Cancellation Costs. Interconnected Transmission Owner oversight costs shall be consistent with Tariff, Attachment P, Appendix 2, section 3.2.3.2(a)(12). Interconnection Customer and the affected Transmission Owner shall inform the Transmission Provider of the rate agreed upon and such rate shall be specified in the Interconnection Service Agreement, Specifications section. In addition , 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 Interconnected Transmission Owner 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 Tariff, Part VI, Preamble, 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 or, if a Surplus Interconnection Service Request, after receipt of the Feasibility 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 Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5, 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 or, if a Surplus Interconnection Service Request, after receipt of the Feasibility Study), the Interconnection Customer must have met the milestones specified in Tariff, Part VI, Subpart B, 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 Tariff, Part VI, Subpart B, 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 Interconnection Construction Service Agreement, Tariff, Attachment P, Appendix 2, section 3.2.3.1 , all Cancellation Costs and the first three months of estimated Transmission Owner's 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) associated with Interconnection Customer building Transmission Owner Attachment Facilities and 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. . Interconnected Transmission Owner oversight costs shall be consistent with Tariff, Attachment P, Appendix 2, section 3.2.3.2(a)(12). 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 the Interconnection Service Agreement, Tariff, Attachment O, Appendix 2, section 11.2.1

(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 Tariff, Attachment O, Appendix 2, section 11.2.3, 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 Tariff, Part VI, Subpart B, 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 Tariff, Part VI, Subpart C, 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 Tariff, Part VI, Preamble, 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.

213 Upgrade Construction Service Agreement:

Notwithstanding any other provision of the Tariff, this section 213 shall apply only with respect to (a) Interconnection Customers that are proposing Merchant Network Upgrades only, and (b) all other New Service Customers that are not Interconnection Customers. For all New Service Requests of New Service Customers subject to this section and for which construction of facilities is required, upon completion of the Facilities Study (or, if no Facilities Study was required, upon completion of the System Impact Study), the Transmission Provider shall tender to the New Service Customer an Upgrade Construction Service Agreement (in Tariff, Attachment GG), to be executed by the New Service Customer, the Transmission Owner whose facilities are affected by such construction, and the Transmission Provider. In the event that construction of facilities by more than one Transmission Owner is required, the Transmission Provider will tender a separate Upgrade 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 Upgrade Construction Service Agreement when this agreement is provide to the New Service Customer for execution. In order to exercise Option to Build, as set forth in Upgrade Construction Service Agreement, Tariff, Attachment GG, Appendix III, section 6.2.1, New Service Customer must provide Transmission Provider and the Interconnected Transmission Owner with written notice of its election to exercise the option no later than thirty (30) days from the date the New Service Customer receives the results of the Facilities Study (or, if no Facilities Study was required, completion of the System Impact Study). New Service Customer may not elect Option to Build after such date.

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 Tariff, Part VI, Subpart B, section 217, of (i) constructing Direct Assignment Facilities, Local Upgrades, and/or Network Upgrades necessary to accommodate its New Service Request to the extent that the Interconnected Transmission Owner is responsible for building such facilities pursuant to Tariff, Part VI and the applicable Upgrade Construction Service Agreement, or (ii) in the event that the New Service Customer exercises the Option to Build pursuant to the Upgrade Construction Service Agreement, Tariff, Attachment GG, Appendix III, section 6.2.1, Interconnected Transmission Owner's oversight costs (i.e., costs incurred by the Interconnected Transmission Owner when engaging in oversight activities to satisfy itself that the New Service Customer is complying with the Interconnected Transmission Owner's standards and specifications for the construction of facilities) associated with the New Service Customer's building Direct Assignment Facilities, and/or Customer-Funded Upgrades that are Direct Connection Network Upgrades, including Costs for tie-in work and Cancellation Costs. Interconnected Transmission Owner's oversight costs shall be consistent with Attachment GG, Appendix III, section 6.2.2(a)(12). New Service Customer and the affected Transmission Owner shall inform the Transmission Provider of the rate agreed upon and such rate shall be specified in the Upgrade Construction Service Agreement, Appendix I. 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 Tariff, Part VI, Preamble, 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 Tariff, Part I, section 12 or, if concerning the Regional Transmission Expansion Plan, consistent with Operating Agreement, Schedule 5, 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 Tariff, Part VI, Subpart B, 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 Upgrade Construction Service Agreement, Tariff, Attachment GG, Appendix III, section 6.2.1 , all Cancellation Costs and the first three months of estimated Transmission Owner's oversight costs associated with the New Service Customer's building Direct Assignment Facilities 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. Interconnected Transmission Owner oversight costs shall be consistent with Tariff, Attachment GG, Appendix III, section 6.2.2(a)(12). 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 Tariff, Attachment GG, Appendix III, section 9.1 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 Tariff, Attachment GG, Appendix III, section 9.3 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 Tariff, Part VI, Preamble, 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.

ATTACHMENT N
Form of
Generation Interconnection Feasibility Study Agreement

RECITALS

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

2. By submitting this Agreement and complying with Section 36.1.01, 110.1, 111.1, or 112.1, as applicable, of the PJM Tariff, the Interconnection Customer has submitted an Interconnection Request. In accordance with Section 36.1.01, 110.1, 111.1, or 112.1, as applicable, of the PJM Tariff, the Interconnection Customer has also submitted with this Agreement the applicable required deposit to the Transmission Provider.

3. By submitting this Agreement to the Transmission Provider, the Interconnection Customer requests interconnection to the Transmission System of a generating project with the following specifications:

   a. Location of generating unit site (include both a written description (e.g., street address, global positioning coordinates) and attach a map in PDF format depicting the property boundaries and the location of the generating unit site):

   _____

   _____

   b. Identification of evidence of ownership interest in, or right to acquire or control, the generating site for a minimum of three years for large generation, or for a minimum of two years for small generation. Include both a written description of the evidence to be relied upon and attach a Word or PDF version copy thereof. If the evidence of ownership interest in, or right to acquire or control the generating site is not yet available, provide a detailed explanation of why such evidence is not available and provide a good faith estimated date upon which such evidence shall be submitted to the Transmission Provider. Though site control evidence may be submitted separately from this Agreement, the Interconnection Request is still subject to the overall deficiency review period and deficiency response period time constraints provided for in Section 36.1.01, 110.1, 111.1, or 112.1, as applicable, of the PJM Tariff, and shall not be assigned a Queue Position without site control evidence acceptable to the Transmission Provider.:

_____

_____

c. Specification of Requested Maximum Facility Output and Requested Capacity Interconnection Rights. The requested Maximum Facility Output megawatts and requested Capacity Interconnection Rights megawatts indicated in this section may be reduced as this Interconnection Request proceeds in the Transmission Provider Interconnection Request process, but may not be increased after this Agreement is submitted to the Transmission Provider.

i. For new generating units, complete the following chart:

Total Requested Maximum Facility Output (as defined in the PJM Tariff) in Megawatts	
Total Requested Capacity Interconnection Rights (as defined in the PJM Tariff) in Megawatts	

ii. For existing generating units that will be adding megawatt capability, complete the following chart:

	Existing Facility	Proposed Facility Incremental Increase	Total
Maximum Facility Output (as defined in the PJM Tariff) in Megawatts			
Capacity Interconnection Rights (as defined in the PJM Tariff) in Megawatts			

iii. For new Behind The Meter generating units, complete the following chart:

Gross Generator Output in Megawatts	
Behind the Meter Load in Megawatts (the sum of the MW generation auxiliary load and any other MW load to be served behind the Point of Interconnection)	
Total Requested Maximum Facility Output (as defined in the PJM Tariff) in Megawatts	
Total Requested Capacity Interconnection Rights (as defined in the PJM Tariff) in Megawatts	

iv. For existing Behind The Meter generating units that will be adding megawatt capability, complete the following chart:

	Existing Facility	Requested Facility Increase	Total
Gross Generator Output in Megawatts			
Behind the Meter Load in Megawatts (the sum of the MW generation auxiliary load and any other MW load to be served behind the Point of Interconnection)			
Maximum Facility Output (as defined in the PJM Tariff) to be exported from the Behind the Meter Generator onto the PJM System, in Megawatts			
Capacity Interconnection Rights, in Megawatts			

d. Identify the fuel type of the new or existing generating unit:

_____

e. A PDF format attachment of the site plan/single line diagram together with a description of the equipment configuration, including a set of preliminary electrical design specifications, and if the generating unit is a wind generation facility, then also submit a set of preliminary electrical design specifications depicting the wind generation facility as a single equivalent generator:

_____

_____

f. Planned date the new generating unit or increase in capability will be in service:

_____

_____

g. Other related information, including for example, but not limited to, identifying: all of Interconnection Customer's prior Queue Positions; stating whether the Interconnection Customer has submitted a previous Interconnection Request for this particular project; and, if this Interconnection Request proposes an increase in capability to an existing generating unit, then identify whether the existing generating unit is subject to an existing Interconnection Agreement and/or Power Purchase Agreement:

_____

_____

h. Is this a request for Surplus Interconnection Service?

_____Yes _____ No

If yes, please complete sections 3a, b, d, e, f, and g in relation to the existing generation facility. In addition, please complete the following chart:

	Existing Facility	**Facility Requesting Surplus Interconnection Service**
Owner/relationship		
Point of Interconnection		
MW capability of the generation units		
Maximum Facility Output		
Interconnection Service Requested		
Circumstances under which Surplus Interconnection Service will be available at the POI		

If the owner of the facility requesting Surplus Interconnection Service is not the owner/affiliate of the existing facility, Interconnection Customer must provide the following documentation acceptable to PJM:

1. Written documentation that the owner of the existing facility has granted permission for Interconnection Customer to request Surplus Interconnection Service from the existing facility; and

2. The parties have entered into or will enter into prior to execution of an Interconnection Service Agreement of a shared facilities agreement.

THE FOLLOWING APPLIES TO BEHIND THE METER GENERATION:

a. If Behind the Meter Generation is identified in this Agreement, all of the requirements in Section 36.1A of the PJM Tariff must also be met.

b. Identify the type and size of the load located (or to be located) at the site of such generation, and attach a PDF format single line diagram depicting the location of the load in relation to the site of such generation:

_____

_____

c. Describe the electrical connections between the generation facility and the load.

_____

_____

THE FOLLOWING APPLIES TO ENERGY STORAGE RESOURCES:

Primary frequency response operating range for Energy Storage Resources:
Minimum State of Charge: _____; and
Maximum State of Charge: _____.

PURPOSE OF THE FEASIBILITY STUDY

4. Consistent with Section 36.2 of the PJM Tariff, the Transmission Provider shall conduct a Generation Interconnection Feasibility Study to provide the Interconnection Customer with preliminary determinations of: (i) the type and scope of the Attachment Facilities, Local Upgrades, and 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 Generation Interconnection Feasibility Study within the timeframe prescribed in Section 36.2 of the PJM Tariff, the Transmission Provider shall notify the Interconnection Customer and explain the reasons for the delay.

5. The Generation 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 Generation 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 Generation 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 Generation Interconnection Feasibility Study. Subject to paragraph 7 of this 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 Generation Interconnection Feasibility Study, the Transmission Provider shall keep confidential all information provided to it by the Interconnection Customer. Upon completion of the Generation 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 the PJM Tariff, the Transmission Provider may contract with consultants, including the Transmission Owners, to provide services or expertise in the Generation 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 Generation Interconnection Feasibility Study. The refundable portion of the deposit paid by the Interconnection Customer described in Section 2 of this Agreement shall be applied toward the Interconnection Customer's Generation Interconnection Feasibility Study cost responsibility. Pursuant to Section 36.1.01, 110, 111, or 112 of the PJM Tariff, as applicable, 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 2 of this agreement, 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 Sections 36.1.01, 110, 111, or 112), then the Interconnection Customer must either: (1) withdraw the Generation Interconnection Request during the deficiency response period (as described in Sections 36.1.01, 110, 111, or 112); or (2) pay all additional estimated costs prior to the expiration of the deficiency response period (as described in Sections 36.1.01, 110, 111, or 112). If the Interconnection Customer fails to complete either (1) or (2),

then the Generation 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, then the Generation Interconnection Request shall be deemed to be terminated and withdrawn.

DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

10. In analyzing and preparing the Generation 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 Agreement nor the Generation 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 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 Generation 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 Generation 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 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 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 Agreement or any part thereof, may not be amended, modified, or waived other than by a writing signed by all Parties hereto.

15. This Agreement shall be binding upon the Parties hereto, their heirs, executors, administrators, successors, and assigns.

16. Neither this Agreement nor the Generation 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 Part IV 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 Agreement and each of its provisions shall be governed by the laws of the state of _____ (the state 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.

19. 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.

20. Multiple Counterparts

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

21. 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.

22. 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.

23. Reservation of Rights

The Transmission Provider shall have the right to make a unilateral filing with the Federal Energy Regulatory Commission ("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.

CERTIFICATION

By initialing the line next to each of the following required elements, Interconnection Customer hereby certifies that it has submitted with this executed Agreement each of the required elements (if this Interconnection Request is being submitted electronically, each of

the required elements must be submitted electronically as individual PDF files, together with an electronic PDF copy of this signed Agreement):

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

_____ **Evidence of an ownership interest in, or right to acquire or control the generating unit site**

_____ **The megawatt size of the proposed generating unit or the amount of increase in megawatt capability of an existing generating unit, and identification of any megawatt portion of the facility's capability that will be a Capacity Resource**

_____ **Identification of the fuel type of the proposed generating unit or upgrade thereto**

_____ **Description of the equipment configuration and a set of preliminary electrical design specifications, and, if the generating unit is a wind generation facility, then the set of preliminary electrical design specifications must depict the wind plant as a single equivalent generator**

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

_____ **All additional information prescribed by the Transmission Provider in the PJM Manuals**

_____ **The full amount (including both the refundable and non-refundable portions) of the required deposit**

IN WITNESS WHEREOF, the Transmission Provider and the Interconnection Customer 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

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

By:_____ _____ _____
Name Title Date

_____
Printed Name

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: {Instructions: 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}

{OR: Instructions: 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 _____.

{OR: Instructions: include the following language when there are a combination of previously awarded CIRs and interim CIRs that have a termination date or event:}

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 ___ {e.g., June 1, 2018}. From the effective date of this ISA until _____ {e.g., May 31, 2018} (the "interim time period"), in addition to the _____ MW of Capacity Interconnection Rights the Interconnection Customer had at the same Point of Interconnection prior to its Interconnection Request associated with this ISA, the Interconnection Customer also may be awarded interim Capacity Interconnection Rights in an amount not to exceed ____ MW. Accordingly, during the interim time period, the Interconnection Customer shall have ____ MW of previously awarded Capacity Interconnection Rights and 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 _____{e.g., May 31, 2018}.

{OR: Instructions: 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.

{OR: Instructions: 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 {Instructions: 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.

{Instructions: 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]

d. [if applicable] Additional Contingent Facilities which must be completed prior to Commercial Operation of the Generating Facility

[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, including oversight costs for Option to Build]

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 Transmission Owner Attachment Facilities 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 (Instructions: this value should be in Section 5.0 of this ISA)

less $ Costs already paid by Interconnection Customer

$ Total Security {Instructions: **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**
- **SCHEDULE I – INTERCONNECTION SPECIFICATIONS FOR AN ENERGY STORAGE RESOURCE**
- **SCHEDULE J – SCHEDULE OF TERMS AND CONDITIONS FOR SURPLUS INTERCONNECTION SERVICE**
- **SCHEDULE K – REQUIREMENTS FOR INTERCONNECTION SERVICE BELOW FULL ELECTRICAL GENERATING CAPABILITY**

1.4A Other Interconnection Options

1.4A.1 Limited Operation:

If any of the Transmission Owner Interconnection Facilities are not reasonably expected to be completed prior to the Interconnection Customer's planned date of Initial Operation, and provided that the Interconnected Transmission Owner has accepted the Customer Interconnection Facilities pursuant to the Interconnection Construction Service Agreement, Transmission Provider shall, upon the request and at the expense of Interconnection Customer, perform appropriate power flow or other operating studies on a timely basis to determine the extent to which the Customer Facility and the Customer Interconnection Facilities may operate prior to the completion of the Transmission Owner Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and the Interconnection Service Agreement. In accordance with the results of such studies and subject to such conditions as Transmission Provider determines to be reasonable and appropriate, Transmission Provider shall (a) permit Interconnection Customer to operate the Customer Facility and the Customer Interconnection Facilities, and (b) grant Interconnection Customer limited, interim Interconnection Rights commensurate with the extent to which operation of the Customer Facility is permitted.

1.4A.2 Provisional Interconnection Service:

Upon the request of Interconnection Customer, and prior to completion of requisite Interconnection Facilities, Network Upgrades, Local Upgrades, or system protection facilities Interconnection Customer may request limited Interconnection Service at the discretion of Transmission Provider based upon an evaluation that will consider the results of available studies, which terms shall be memorialized in the Interconnection Service Agreement. Consistent with Tariff, Part VI, Subpart B, section 212.4, Interconnection Customer may execute the Interconnection Service Agreement, request dispute resolution or request that the Interconnection Service Agreement be filed unexecuted with the Commission. Transmission Provider shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if Interconnection Customer interconnects without modifications to the Generating Facility or the Transmission System. Transmission Provider shall determine whether any Interconnection Facilities, Network Upgrades, Local Upgrades, or system protection facilities that are necessary to meet the requirements of NERC, or any applicable Regional Entity for the interconnection of a new, modified and/or expanded Generating Facility are in place prior to the commencement of Interconnection Service from the Generating Facility. Where available studies indicate that such Interconnection Facilities, Network Upgrades, Local Upgrades, and/or system protection facilities that are required for the interconnection of a new, modified and/or expanded Generating Facility are not currently in place, Transmission Provider will perform a study, at the Interconnection Customer's expense, to confirm the facilities that are required for Provisional Interconnection Service. The maximum permissible output of the Generating Facility shall be studied and updated on a frequency determined by Transmission Provider and at the Interconnection Customer's expense. Interconnection Customer assumes all risk and liabilities with respect to the Provisional Interconnection Service, including changes in output limits and

Interconnection Facilities, Network Upgrades, Local Upgrades, and/or system protection facilities cost responsibilities.

4.7 Reactive Power and Primary Frequency Response

4.7.1 Reactive Power

4.7.1.1 Reactive Power Design Criteria

4.7.1.1.1 New Facilities:

For all new Generating Facilities to be interconnected pursuant to the Tariff, other than wind-powered and other non-synchronous generation facilities, the Generation Interconnection Customer shall design its Customer Facility to maintain a composite power delivery at continuous rated power output at a power factor of at least 0.95 leading to 0.90 lagging. For all new wind-powered and other non-synchronous generation facilities the Generation Interconnection Customer shall design its Customer Facility with the ability to maintain a composite power delivery at a power factor of at least 0.95 leading to 0.95 lagging across the full range of continuous rated power output. For all wind-powered and other non-synchronous generation facilities entering the New Service Queue on or after November 1, 2016, the power factor requirement shall be measured at the high-side of the facility substation transformers. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. For all wind-powered and other non-synchronous generation facilities entering the New Service Queue on or after May 1, 2015, and before November 1, 2016, the power factor requirement shall be measured at the generator's terminals. For new generation resources of more than 20 MW, other than wind-powered and other non-synchronous Generating Facilities, the power factor requirement shall be measured at the generator's terminals. For new generation resources of 20 MW or less, and all wind-powered and other non-synchronous generation facilities entering the New Service Queue prior to May 1, 2015, the power factor requirement shall be measured at the Point of Interconnection. Any different reactive power design criteria that Transmission Provider determines to be appropriate for a wind-powered or other non-synchronous generation facility shall be stated in the Interconnection Service Agreement. A Transmission Interconnection Customer interconnecting Merchant D.C. Transmission Facilities and/ or Controllable A.C. Merchant Transmission Facilities shall design its Customer Facility to maintain a power factor at the Point of Interconnection of at least 0.95 leading and 0.95 lagging, when the Customer Facility is operating at any level within its approved operating range.

4.7.1.1.2 Increases in Generating Capacity or Energy Output:

All increases in the capacity or energy output of any generation facility interconnected with the Transmission System, other than wind-powered and other non-synchronous Generating Facilities, shall be designed with the ability to maintain a composite power delivery at continuous rated power output at a power factor for all incremental MW of capacity or energy output, of at least 1.0 (unity) to 0.90 lagging. Wind-powered generation facilities and other non-synchronous generation facilities entering the New Service Queue on or after November 1, 2016, shall be designed with the ability to maintain a composite power delivery at a power factor for all

incremental MW of capacity or energy output of at least 0.95 leading to 0.95 lagging measured at the high-side of the facility substation transformers across the full range of continuous rated power output. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. Wind-powered generation facilities and other non-synchronous generation facilities entering the New Service Queue on or after May 1, 2015, and before November 1, 2016, shall be designed with the ability to maintain a composite power delivery at a power factor for all incremental MW of capacity or energy output, of at least 0.95 leading to 0.95 lagging measured at the generator's terminals under conditions in which a wind-powered generation facility's real power output exceeds 25 percent of its continuous rated power output and, for all other non-synchronous generation facilities, across the full range of continuous rated power output. Wind-powered generation facilities and other non-synchronous generation facilities entering the New Service Queue prior to May 1, 2015 shall be designed with the ability to maintain a composite power delivery at continuous rated power output at a power factor for all incremental MW of capacity of energy output of at least 1.0 (unity) to 0.95 lagging measured at the generator's terminals. The power factor requirement associated with increases in capacity or energy output of more than 20 MW to synchronous generation facilities interconnected with the Transmission System shall be measured at the generator's terminals. The power factor requirement associated with increases in capacity or energy output of 20 MW or less to synchronous generation facilities interconnected to the Transmission System shall be measured at the Point of Interconnection.

4.7.1.2 Obligation to Supply Reactive Power:

Interconnection Customer agrees, as and when so directed by Transmission Provider or when so directed by the Interconnected Transmission Owner acting on behalf or at the direction of Transmission Provider, to operate the Customer Facility to produce reactive power within the design limitations of the Customer Facility pursuant to voltage schedules, reactive power schedules or power factor schedules established by Transmission Provider or, as appropriate, the Interconnected Transmission Owner. Transmission Provider shall maintain oversight over such schedules to ensure that all sources of reactive power in the PJM Region, as applicable, are treated in an equitable and not unduly discriminatory manner. Interconnection Customer agrees that Transmission Provider and the Interconnected Transmission Owner, acting on behalf or at the direction of Transmission Provider, may make changes to the schedules that they respectively establish as necessary to maintain the reliability of the Transmission System.

4.7.1.3 Deviations from Schedules:

In the event that operation of the Customer Facility of an Interconnection Customer causes the Transmission System or the Interconnected Transmission Owner's facilities to deviate from appropriate voltage schedules and/or reactive power schedules as specified by Transmission Provider or the Interconnected Transmission Owner's operations control center (acting on behalf or at the direction of Transmission Provider), or that otherwise is inconsistent with Good Utility Practice and results in an unreasonable deterioration of the quality of electric service to other customers of Transmission Provider or the Interconnected Transmission Owner, the

Interconnection Customer shall, upon discovery of the problem or upon notice from Transmission Provider or the Interconnected Transmission Owner, acting on behalf or at the direction of Transmission Provider, take whatever steps are reasonably necessary to alleviate the situation at its expense, in accord with Good Utility Practice and within the reactive capability of the Customer Facility. In the event that the Interconnection Customer does not alleviate the situation within a reasonable period of time following Transmission Provider's or the Interconnected Transmission Owner's notice thereof, the Interconnected Transmission Owner, with Transmission Provider's approval, upon notice to the Interconnection Customer and at the Interconnection Customer's expense, may take appropriate action, including installation on the Transmission System of power factor correction or other equipment, as is reasonably required, consistent with Good Utility Practice, to remedy the situation cited in Transmission Provider's or the Interconnected Transmission Owner's notice to the Interconnection Customer under this section.

4.7.1.4 Payment for Reactive Power:

Any payments to the Interconnection Customer for reactive power shall be in accordance with Schedule 2 of the Tariff.

4.7.2 Primary Frequency Response:

Section 4.7.2 of this ISA and its subsections apply to New Service Requests received on or after October 1, 2018.

Generation Interconnection Customer shall ensure the primary frequency response capability of its Customer Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Customer Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Generation Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and ±0.036 Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Customer Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Customer Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Customer Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Generation Interconnection Customer shall notify Transmission Provider that the primary frequency response capability of

the Customer Facility has been tested and confirmed during commissioning. Once Generation Interconnection Customer has synchronized the Customer Facility with the Transmission System, Generation Interconnection Customer shall operate the Customer Facility consistent with the provisions specified in sections 4.7.2.1 and 4.7.2.2 of this agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Customer Facilities.

4.7.2.1 Governor or Equivalent Controls:

Whenever the Customer Facility is operated in parallel with the Transmission System, Generation Interconnection Customer shall operate the Customer Facility with its governor or equivalent controls in service and responsive to frequency. Generation Interconnection Customer shall: (1) in coordination with Transmission Provider and/or the relevant balancing authority, set the deadband parameter to: (1) a maximum of ±0.036 Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Generation Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to Transmission Provider and/or the relevant balancing authority upon request. If Generation Interconnection Customer needs to operate the Customer Facility with its governor or equivalent controls not in service, Generation Interconnection Customer shall immediately notify Transmission Provider and the relevant balancing authority, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Generation Interconnection Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Generation Interconnection Customer shall make Reasonable Efforts to keep outages of the Customer Facility's governor or equivalent controls to a minimum whenever the Customer Facility is operated in parallel with the Transmission System.

4.7.2.2 Timely and Sustained Response:

Generation Interconnection Customer shall ensure that the Customer Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Customer Facility has operating capability in the direction needed to correct the frequency deviation. Generation Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Customer Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

4.7.2.3 Exemptions:

Customer Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from sections 4.7.2, 4.7.2.1, and 4.7.2.2 of this agreement. Customer Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in section 4.7.2, but shall be otherwise exempt from the operating requirements in sections 4.7.2, 4.7.2.1, 4.7.2.2, and 4.7.2.4 of this agreement.

4.7.2.4 Energy Storage Resources:

Generation Interconnection Customer interconnecting an Energy Storage Resource shall establish an operating range in Schedule I of this ISA that specifies a minimum state of charge and a maximum state of charge between which the Energy Storage Resource will be required to provide primary frequency response consistent with the conditions set forth in sections 4.7.2, 4.7.2.1, 4.7.2.2, and 4.7.2.3 of this agreement. Schedule I shall specify whether the operating range is static or dynamic, and shall consider (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the Energy Storage Resource; (5) operational limitations of the Energy Storage Resource due to manufacturer specifications; and (6) any other relevant factors agreed to by Transmission Provider and Generation Interconnection Customer, and in consultation with the relevant transmission owner or balancing authority as appropriate. If the operating range is dynamic, then Schedule I must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Generation Interconnection Customer's Energy Storage Resource is required to provide timely and sustained primary frequency response consistent with section 4.7.2.2 of this agreement when it is online and dispatched to inject electricity to the Transmission System and/or receive electricity from the Transmission System. This excludes circumstances when the Energy Storage Resource is not dispatched to inject electricity to the Transmission System and/or dispatched to receive electricity from the Transmission System. If Generation Interconnection Customer's Energy Storage Resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Generation Interconnection Customer's Energy Storage Resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

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 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.

4.13 Nuclear Generating Facilities:

In the event that the Customer Facility is a nuclear Generating Facility, the Interconnection Parties shall agree to such non-standard terms and conditions as are reasonably necessary to accommodate the Interconnection Customer's satisfaction of Nuclear Regulatory Commission requirements relating to the safety and reliability of operations of such facilities.

5.5 Right to Observe Testing:

Each Interconnected Entity shall notify the other Interconnected Entity in advance of its performance of tests of its portion of the Interconnection Facilities. The other Interconnected Entity shall, at its own expense, have the right, but not the obligation, to:

(a) Observe the other Party's tests and/or inspection of any of its system protection facilities and other protective equipment, including power system stabilizers;

(b) Review the settings of the other Party's system protection facilities and other protective equipment;

(c) Review the other Party's maintenance record relative to the Interconnection Facilities, system protection facilities and other protective equipment; and

(d) Exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party.

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 Tariff, Attachment P, Appendix 2, section 3.2.3.1, for the Interconnected Transmission Owner's 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) associated with Interconnection Customer's building Transmission Owner Attachment Facilities and Direct Connection Network Upgrades, including but not limited to Costs for tie-in work and Cancellation Costs. Interconnected Transmission Owner oversight costs shall be consistent with Tariff, Attachment P, Appendix 2, section 3.2.3.2(a)(12). 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.

13.1A. 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 J

SCHEDULE OF TERMS AND CONDITIONS FOR SURPLUS INTERCONNECTION SERVICE

SCHEDULE K

REQUIREMENTS FOR INTERCONNECTION SERVICE BELOW FULL ELECTRICAL GENERATING CAPABILITY

ATTACHMENT O-1

FORM OF
INTERIM INTERCONNECTION SERVICE AGREEMENT

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

_____
and

_____

(PJM Queue Position #___)

1.0 This Interim Interconnection Service Agreement ("Interim ISA"), including the Specifications attached hereto and incorporated herein, is entered into by and among PJM Interconnection, L.L.C. ("Transmission Provider" or "PJM"), [_____] ("Interconnection Customer" [OPTIONAL: or ["short name"]]), and [_____] ("Interconnected Transmission Owner" [OPTIONAL: or ["short name"]]). [Use as/when applicable: This Interim 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 Attached are Specifications for the Customer Facility that Interconnection Customer proposes to interconnect to the Transmission Provider's Transmission System. Interconnection Customer represents and warrants that, upon completion of their construction, it will own or control the facilities identified in the Specifications attached hereto and made a part hereof. In the event that Interconnection Customer will not own the facilities, Interconnection Customer represents and warrants that it is authorized by the owners of such facilities to enter into this Interim ISA and to represent such control.

3.0 In order to advance the completion of its interconnection under the PJM Open Access Transmission Tariff ("Tariff"), Interconnection Customer has requested an Interim ISA and Transmission Provider has determined that Interconnection Customer is eligible under the Tariff to obtain this Interim ISA.

4.0 (a) In accord with Section 211 of the Tariff, Interconnection Customer, on or before the effective date of this Interim ISA, shall provide 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 Transmission Provider in the amount of $ _____, which amount equals the estimated costs, determined in

accordance with Section 217 of the Tariff, of acquiring, designing, constructing and/or installing the facilities described in section 3.0 of the Attached Specifications. Should Interconnection Customer fail to provide such security in the amount or form required, this Interim ISA shall be terminated. Interconnection Customer acknowledges (1) that it will be responsible for 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, and (2) that the payment security under this section does not include any additional amounts that it will owe in the event that it executes a final Interconnection Service Agreement, as described in section 7.0(a) below.

(b) Interconnection Customer acknowledges (1) that the purpose of this Interim ISA is to expedite, at Interconnection Customer's request, the acquisition, design, construction and/or installation of certain materials and equipment, as described in the Specifications, necessary to interconnect its proposed facilities with Transmission Provider's Transmission System; and (2) that Transmission Provider's Interconnection Studies related to such facilities have not been completed, but that the [identify completed feasibility and/or system impact study(ies)], dated [_____], that included Interconnection Customer's project sufficiently demonstrated, in Interconnection Customer's sole opinion, the necessity of facilities additions to the Transmission System to accommodate Interconnection Customer's project to warrant, in Interconnection Customer's sole judgment, its request that the Interconnected Transmission Owner acquire, design, construct and/or install the equipment indicated in the Specifications for use in interconnecting Interconnection Customer's project with the Transmission System.

5.0 This Interim ISA shall be effective on the date it is executed by all Interconnection Parties and shall terminate upon the execution and delivery by Interconnection Customer and Transmission Provider of the final Interconnection Service Agreement described in section 7.0(a) below, or on such other date as mutually agreed upon by the parties, unless earlier terminated in accordance with the Tariff.

6.0 In addition to the milestones stated in Section 212.5 of the Tariff, during the term of this Interim ISA, Interconnection Customer shall ensure that its generation project meets each of the following development milestones:

[SPECIFY MILESTONES]

OR

[NOT APPLICABLE FOR THIS INTERIM ISA]

OR

[MILESTONE REQUIREMENTS WILL BE SPECIFIED IN THE FURTHER INTERCONNECTION SERVICE AGREEMENT DESCRIBED IN SECTION 7.0(a)]

7.0 (a) Transmission Provider and the Interconnected Transmission Owner agree to provide for the acquisition, design, construction and/or installation of the facilities identified, and to the extent described, in Section 3.0 of the Specifications in accordance with Part IV of the Tariff, as amended from time to time, and this Interim ISA. Except to the extent for which the Specifications provide for interim interconnection rights for the Interconnection Customer, the parties agree that (1) this Interim ISA shall not provide for or authorize Interconnection Service for the Interconnection Customer, and (2) Interconnection Service will commence only after Interconnection Customer has entered into a final Interconnection Service Agreement with Transmission Provider and the Interconnection Transmission Owner (or, alternatively, has exercised its right to initiate dispute resolution or to have the final Interconnection Service Agreement filed with the FERC unexecuted) after completion of the Facilities Study related to Interconnection Customer's Interconnection Request and otherwise in accordance with the Tariff. The final Interconnection Service Agreement may further provide for construction of, and payment for, transmission facilities additional to those identified in the attached Specifications. Should Interconnection Customer fail to enter into such final Interconnection Service Agreement (or, alternatively, to initiate dispute resolution or request that the agreement be filed with the FERC unexecuted) within the time prescribed by the Tariff, Transmission Provider shall have the right, upon providing written notice to Interconnection Customer, to terminate this Interim ISA.

(b) In the event that Interconnection Customer decides not to interconnect its proposed facilities, as described in Section 1.0 of the Specifications to the Transmission System, it shall immediately give Transmission Provider written notice of its determination. Interconnection Customer shall be responsible for the Costs incurred pursuant to this Interim ISA by Transmission Provider and/or by the Interconnected Transmission Owner (1) on or before the date of such notice, and (2) after the date of such notice, if the costs could not reasonably be avoided despite, or were incurred by reason of, Interconnection Customer's determination not to interconnect. Interconnection Customer's liability under the preceding sentence shall include all Cancellation Costs in connection with the acquisition, design, construction and/or installation of the facilities described in section 3.0 of the Specifications. In the event the Interconnected Transmission Owner incurs Cancellation Costs, it shall provide the Transmission Provider, with a copy to the Interconnection Customer, with a written demand for payment and with reasonable documentation of such Cancellation Costs. Within 60 days after the date of Interconnection Customer's notice, 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 (i) Interconnection Customer's cost responsibility under this Interim ISA and the Tariff for Costs, including Cancellation Costs, of the facilities described in section 3.0 of the Specifications and (ii) Interconnection Customer's previous payments under this Interim ISA. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment that the preceding sentence requires it to make unless and until the Interconnected Transmission Owner has returned to it the portion of Interconnection Customer's previous payments that Transmission Provider must pay under that sentence.

This Interim ISA shall be deemed to be terminated upon completion of all payments required under this paragraph (b).

(c) Disposition of the facilities related to this Interim ISA after receipt of Interconnection Customer's notice of its determination not to interconnect shall be decided in accordance with Section 211.1 of the Tariff.

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

9.0 In analyzing and preparing the Facilities Study or the System Impact Study if no Facilities Study is required, and in designing and constructing the Attachment Facilities, Local Upgrades and/or Network Upgrades described in the Specifications attached to this Interim 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 NO FACILITIES STUDY IS REQUIRED OR OF THE ATTACHMENT FACILITIES, LOCAL UPGRADES AND/OR NETWORK UPGRADES, PROVIDED, HOWEVER, that Transmission Provider warrants that the transmission facilities described in Section 3.0 of the Specifications will be designed, constructed 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 Within 120 days after the Interconnected Transmission Owner completes acquisition, design, construction and/or installation of the facilities described in Section 3.0 of the Specifications, Transmission Provider shall provide Interconnection Customer with 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 responsibility under this Interim ISA and the Tariff for the actual cost of such equipment, and (b) Interconnection Customer's previous aggregate payments to Transmission Provider and the Interconnected Transmission Owner hereunder. Notwithstanding the

foregoing, however, Transmission Provider shall not be obligated to make any payment that the preceding sentence requires it to make unless and until the Interconnected Transmission Owner has returned to it the portion of Interconnection Customer's previous payments that Transmission Provider must pay under that sentence.

11.0 No third party beneficiary rights are created under this Interim ISA, provided, however, that payment obligations imposed on Interconnection Customer hereunder are agreed and acknowledged to be for the benefit of the Interconnected Transmission Owner actually performing the services associated with the interconnection of the Generating Facilities and any associated upgrades of other facilities.

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

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

14.0 This Interim ISA shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.

15.0 This Interim ISA shall not be construed as an application for service under Part II or Part III of the Tariff.

16.0 Any notice or request made to or by either Party regarding this Interim ISA 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

[CONTACT NAME/ADDRESS]

Interconnected Transmission Owner

[CONTACT NAME/ADDRESS]

17.0 All portions of the Tariff and the Operating Agreement pertinent to the subject of this Interim ISA are incorporated herein and made a part hereof.

18.0 This Interim ISA is entered into pursuant to Part IV of the Tariff.

19.0 Neither party shall be liable for consequential, incidental, special, punitive, exemplary or indirect damages, lost profits or other business interruption damages, by statute, in tort or contract, under any indemnity provision or otherwise with respect to any claim, controversy or dispute arising under this Interim ISA.

20.0 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 20.1, Schedule A to this Interim ISA shall set forth the Interconnection Customer's agreement to conform with the IRS safe harbor provisions for non-taxable status.

20.1 Tax Liability

20.1.1 Safe Harbor Provisions:

This Section 20.1.1 is applicable only to Generation Interconnection Customers. Provided that Interconnection Customer agrees to conform to all requirements of the Internal Revenue Service ("IRS") (e.g., the "safe harbor" provisions of IRS Notices 2001-82 and 88-129) that would confer nontaxable status on some or all of the transfer of property, including money, by Interconnection Customer to the Interconnected Transmission Owner for payment of the Costs of construction of the Transmission Owner Interconnection Facilities, the Interconnected Transmission Owner, based on such agreement and on current law, shall treat such transfer of property to it as nontaxable income and, except as provided in Section 20.1.2 below, shall not include income taxes in the Costs of Transmission Owner Interconnection Facilities that are payable by Interconnection Customer under the Interim Interconnection Service Agreement, the Interconnection Service Agreement or the Interconnection Construction Service Agreement. Interconnection Customer shall document its agreement to conform to IRS requirements for such non-taxable status in the Interconnection Service Agreement, the Interconnection Construction Service Agreement, and/or the Interim Interconnection Service Agreement.

20.1.2 Tax Indemnity:

Interconnection Customer shall indemnify the Interconnected Transmission Owner for any costs that Interconnected Transmission Owner incurs in the event that the IRS and/or a state department of revenue (State) determines that the property, including money, transferred by Interconnection Customer to the Interconnected Transmission Owner with respect to the construction of the Transmission Owner Interconnection Facilities is taxable income to the Interconnected Transmission Owner. Interconnection Customer shall pay to the Interconnected Transmission Owner, on demand, the amount of any income taxes that the IRS or a State assesses to the Interconnected Transmission Owner in connection with such transfer of property and/or money, plus any applicable interest and/or penalty charged to the Interconnected Transmission Owner. In the event that the Interconnected Transmission Owner chooses to contest such assessment, either at the request of Interconnection Customer or on its own behalf, and prevails in reducing or eliminating the tax, interest and/or penalty assessed against it, the Interconnected

Transmission Owner shall refund to Interconnection Customer the excess of its demand payment made to the Interconnected Transmission Owner over the amount of the tax, interest and penalty for which the Interconnected Transmission Owner is finally determined to be liable. Interconnection Customer's tax indemnification obligation under this section shall survive any termination of the Interim Interconnection Service Agreement or Interconnection Construction Service Agreement.

20.1.3 Taxes Other Than Income Taxes:

Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, the Interconnected Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the Interconnected Transmission Owner for which Interconnection Customer may be required to reimburse Transmission Provider under the terms of this Interim Interconnection Service Agreement or Part VI of the Tariff. Interconnection Customer shall pay to the Interconnected Transmission Owner on a periodic basis, as invoiced by the Interconnected Transmission Owner, the Interconnected Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Interconnection Customer and the Interconnected Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Interconnection Customer to the Interconnected Transmission Owner for such contested taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Interconnected Transmission Owner.

20.1.4 Income Tax Gross-Up

20.1.4.1 Additional Security:

In the event that Interconnection Customer does not provide the safe harbor documentation required under Section 20.1.1 prior to execution of this Interim Interconnection Service Agreement, within 15 days after such execution, Transmission Provider shall notify Interconnection Customer in writing of the amount of additional Security that Interconnection Customer must provide. The amount of Security that a Transmission Interconnection Customer must provide initially pursuant to this Interim Interconnection Service Agreement shall include any amounts described as additional Security under this Section 20.1.4 regarding income tax gross-up.

20.1.4.2 Amount:

The required additional Security shall be in an amount equal to the amount necessary to gross up fully for currently applicable federal and state income taxes the estimated Costs of Local Upgrades and Network Upgrades for which Interconnection Customer previously provided Security. Accordingly, the additional Security shall equal the amount necessary to increase the

total Security provided to the amount that would be sufficient to permit the Interconnected Transmission Owner to receive and retain, after the payment of all applicable income taxes ("Current Taxes") and taking into account the present value of future tax deductions for depreciation that would be available as a result of the anticipated payments or property transfers (the "Present Value Depreciation Amount"), an amount equal to the estimated Costs of Local Upgrades and Network Upgrades for which Interconnection Customer is responsible under the Interconnection Service Agreement. For this purpose, Current Taxes shall be computed based on the composite federal and state income tax rates applicable to the Interconnected Transmission Owner at the time the additional Security is received, determined using the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting the Interconnected Transmission Owner's anticipated tax depreciation deductions associated with such payments or property transfers by its current weighted average cost of capital.

20.1.4.3 Time for Payment:

Interconnection Customer must provide the additional Security, in a form and with terms as required by Sections 212.4 of the Tariff, within 15 days after its receipt of Transmission Provider's notice under this section. The requirement for additional Security under this section shall be treated as a milestone included in the Interconnection Service Agreement pursuant to Section 212.5 of the Tariff.

20.1.5 Tax Status:

Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Interim Interconnection Service Agreement or the Tariff is intended to adversely affect any Interconnected Transmission Owner's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

21.0 Addendum of Interconnection Requirement for all Wind or Non-synchronous Generation Facilities. To the extent required, Schedule B to this Interim ISA sets forth interconnection requirements for all wind or non-synchronous generation facilities and is hereby incorporated by reference and made a part of this Interim ISA.

22.0 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.

IN WITNESS WHEREOF, Transmission Provider, Interconnection Customer and Interconnected Transmission Owner have caused this Interim 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
INTERIM INTERCONNECTION SERVICE AGREEMENT
By and Among
PJM INTERCONNECTION, L.L.C.
And

_____

And

_____

(PJM Queue Position #___)

1.0 Description of 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 Interim Interconnection Service Agreement.}

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

Nominal Rated Capability: _____MW}

2.0 Interconnection Rights: Interconnection Customer shall obtain Capacity Interconnection Rights in accordance with Subpart C of Part VI of the Tariff at the location specified in section 1.0b upon its execution of the final Interconnection Service Agreement described in section 7.0(a) of this Interim ISA. [**if applicable, add:** , provided, however, that pending execution of the final Interconnection Service Agreement, Interconnection Customer shall be entitled to the following interim rights:

Pursuant to and subject to the applicable terms of the Tariff, Interconnection Customer shall have Capacity Interconnection Rights as a Capacity Resource at the Point of Interconnection specified in this Interim ISA in the amount of __ MW, for the time period of _____ to _____. To the extent that the Customer Facility described in section 1.0 is not a Capacity Resource with Capacity Interconnection Rights, such Customer Facility shall be an Energy Resource. Pursuant to this Interim ISA, the Customer Facility 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.]

3.0.A Facilities to be acquired, designed, constructed and/or installed by the Interconnected Transmission Owner under this Interim ISA:

3.0.B Facilities to be acquired, designed, constructed and/or installed by the Interconnection Customer under this Interim ISA:

4.0 Interconnection Customer shall be subject to the charges detailed below:

4.1 Attachment Facilities Charge:

4.2 Local Upgrades Charge:

4.3 Network Upgrades Charge:

4.4 Cost Breakdown:

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

$ Total

SCHEDULES: {Note: Schedules A and B are required, others are optional; add if applicable and desirable for clarity.}

SCHEDULE A – INTERCONNECTION CUSTOMER'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS

SCHEDULE B - INTERCONNECTION REQUIREMENTS FOR A WIND GENERATION FACILITY

SCHEDULE __ - CUSTOMER FACILITY LOCATION/SITE PLAN

SCHEDULE __ - SINGLE-LINE DIAGRAM

SCHEDULE A

INTERCONNECTION CUSTOMER'S AGREEMENT TO CONFORM WITH IRS SAFE HARBOR PROVISIONS FOR NON-TAXABLE STATUS

{Include the appropriate language from the alternatives below:}

{Include the following language if not required:}
Not Required.

[OR]

{Include the following language if applicable to Interconnection Customer:}

As provided in Section 20.1 of this Interim ISA and subject to the requirements thereof, Interconnection Customer represents that it meets all qualifications and requirements as set forth in Section 118(a) and 118(b) of the Internal Revenue Code of 1986, as amended and interpreted by Notice 2016-36, 2016-25 I.R.B. (6/20/2016) (the "IRS Notice"). Interconnection Customer agrees to conform with all requirements of the safe harbor provisions specified in the IRS Notice, as they may be amended, as required to confer non-taxable status on some or all of the transfer of property, including money, by Interconnection Customer to Interconnected Transmission Owner with respect to the payment of the Costs of construction and installation of the Transmission Owner Interconnection Facilities specified in this Interim ISA.

Nothing in Interconnection Customer's agreement pursuant to this Schedule A shall change Interconnection Customer's indemnification obligations under Section 20.1 of this Interim ISA.

{Include the following Schedule B, as applicable, for New Service Requests received before May 1, 2015}

SCHEDULE B

INTERCONNECTION REQUIREMENTS FOR A

WIND GENERATION FACILITY

{Include the appropriate language from the alternatives below}

{Include the following language if the Customer Facility is not a wind generation facility}

Not Required

[OR]

{Include the following language when the Customer Facility is a wind generation facility}

Schedule B sets forth requirements and provisions specific to the interconnection of a wind generation facility that is greater than 20 MW. All other requirements pertaining to the interconnection of generation facilities above 20 MW set forth in Part IV of the Tariff continue to apply to wind generation facility interconnections.

A. Technical Standards Applicable to a Wind Generation Facility

i. Low Voltage Ride-Through (LVRT) Capability

A wind generation facility shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The Schedule B LVRT standard provides for a transition period standard and a post-transition period standard.

Transition Period LVRT Standard

The transition period standard applies to wind generation facilities subject to Commission Order No. 661 that have either: (i) Interconnection Service Agreements signed and filed with the Commission, filed with the Commission in unexecuted form, or filed with the Commission as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generation turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

1. Wind generation facilities are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time

requirement for a three-phase fault will be specific to the wind generation facility substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generation facility shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generation facility step-up transformer (i.e. the transformer that steps the voltage up to the transmission interconnection voltage or "GSU"), after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generation facility may disconnect from the transmission system.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.

3. Wind generation facilities may be tripped after the fault period if this action is intended as part of a special protection system.

4. Wind generation facilities may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator, etc.) within the wind generation facility or by a combination of generator performance and additional equipment.

5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the initial effective date of the Schedule B LVRT standard are exempt from meeting the Schedule B LVRT standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Schedule B LVRT standard.

Post-transition Period LVRT Standard

All wind generation facilities subject to Commission Order No. 661 and not covered by the transition period described above must meet the following requirements:

1. Wind generation facilities are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generation facility substation location, as determined by and documented by the transmission provider. The maximum clearing time the wind generation facility shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generation facility may disconnect from the transmission system. A wind generation facility shall remain interconnected during such a fault on the transmission system for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.

3. Wind generation facilities may be tripped after the fault period if this action is intended as part of a special protection system.

4. Wind generation facilities may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator) within the wind generation facility or by a combination of generator performance and additional equipment.

5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the initial effective date of the Schedule B LVRT standard are exempt from meeting the Schedule B LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Schedule B LVRT Standard.

ii. Power Factor Design Criteria (Reactive Power)

The power factor requirements for wind generation facilities set forth in section 4.7.1 of Appendix 2 to Attachment O of the Tariff can be met by using, for example, power electronic devices designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors if agreed to by the Transmission Provider, or a combination of the two. The Interconnection Customer shall not disable power factor equipment while the wind generation facility is in operation. Wind generation facilities shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the System Impact Study shows this to be required for system safety or reliability.

iii. Supervisory Control and Data Acquisition (SCADA) Capability

The wind generation facility shall provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability. The Transmission Provider and the wind generation facility Interconnection Customer shall determine what SCADA information is essential for the proposed wind generation facility, taking into account the size of the facility and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

iv. Meteorological Data Reporting Requirement

The wind generation facility shall, at a minimum, be required to provide the Transmission Provider with site-specific meteorological data including:

- Temperature (degrees Fahrenheit)
- Wind speed (meters/second)
- Wind direction (degrees from True North)

- Atmospheric pressure (hectopascals)
- Forced outage data (wind turbine and MW unavailability)

The Transmission Provider and Interconnection Customer may mutually agree to any additional meteorological data that are required for the development and deployment of a power production forecast. All requirements for meteorological and forced outage data must be commensurate with the power production forecasting employed by the Transmission Provider. Such additional mutually agreed upon requirements for meteorological and forced outage data are set forth below:

[SPECIFICY AGREED UPON METEOROLOGICAL AND FORCED OUTAGE DATA REQUIREMENTS]

OR

[NOT APPLICABLE FOR THIS INTERIM ISA]

{Include the following Schedule B, as applicable, for New Service Requests received on or after May 1, 2015}

SCHEDULE B

INTERCONNECTION REQUIREMENTS FOR ALL WIND AND NON-SYNCHRONOUS GENERATION FACILITIES

{Include the appropriate language from the alternatives below}

{Include the following language if the Customer Facility is not a wind or non-synchronous generation facility}

Not Required

[OR]

{Include the following language when the Customer Facility is a wind or non-synchronous generation facility}

A. Voltage Ride Through Requirements

The Customer Facility shall be designed to remain in service (not trip) for voltages and times as specified for the Eastern Interconnection in Attachment 1 of NERC Reliability Standard PRC-024-1, and successor Reliability Standards, for both high and low voltage conditions, irrespective of generator size, subject to the permissive trip exceptions established in PRC-024-1 (and successor Reliability Standards).

B. Frequency Ride Through Requirements

The Customer Facility shall be designed to remain in service (not trip) for frequencies and times as specified in Attachment 2 of NERC Reliability Standard PRC-024-1, and successor Reliability Standards, for both high and low frequency condition, irrespective of generator size, subject to the permissive trip exceptions established in PRC-024-1 (and successor Reliability Standards).

C. Supervisory Control and Data Acquisition (SCADA) Capability

The wind or non-synchronous generation facility shall provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability. The Transmission Provider and the wind or non-synchronous generation facility Interconnection Customer shall determine what SCADA information is essential for the proposed wind or non-synchronous generation facility, taking into account the size of the facility and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

D. Meteorological Data Reporting Requirement (Applicable to wind generation facilities only)

The wind generation facility shall, at a minimum, be required to provide the Transmission Provider with site-specific meteorological data including:

- Temperature (degrees Fahrenheit)
- Wind speed (meters/second)
- Wind direction (degrees from True North)
- Atmosphere pressure (hectopascals)
- Forced outage data (wind turbine and MW unavailability)

The Transmission Provider and Interconnection Customer may mutually agree to any additional meteorological data that are required for the development and deployment of a power production forecast. All requirements for meteorological and forced outage data must be commensurate with the power production forecasting employed by the Transmission Provider. Such additional mutually agreed upon requirements for meteorological and forced outage data are set forth below:

[SPECIFY AGREED UPON METEOROLOGICAL AND FORCED OUTAGE DATA REQUIREMENTS]

[OR]

[NOT APPLICABLE FOR THIS INTERIM ISA]

3.2 Construction by Interconnected Transmission Owner

3.2.1 Standard Option:

The Interconnected Transmission Owner shall use Reasonable Efforts to design, procure, construct and install the Transmission Owner Interconnection Facilities that it is responsible for constructing in accordance with the Schedule of Work.

3.2.1.1 Construction Sequencing:

In general, the sequence of the proposed dates of Initial Operation of Interconnection Customers seeking interconnection to the Transmission System will determine the sequence of construction of Network Upgrades.

3.2.2 Negotiated Contract Option:

As an alternative to the Standard Option set forth in Section 3.2.1 of this Appendix 2, the Interconnected Transmission Owner and the Interconnection Customer may mutually agree to a Negotiated Contract Option for the Interconnected Transmission Owner's design, procurement, construction and installation of the Transmission Owner Interconnection Facilities. Under the Negotiated Contract Option, the Interconnection Customer and the Interconnected Transmission Owner may agree to terms different from those included in the Standard Option of Section 3.2.1 above and the corresponding standard terms set forth in the applicable provisions of Part VI of the Tariff and this Appendix 2. Under the Negotiated Contract Option, negotiated terms may include the work schedule applicable to the Interconnected Transmission Owner's construction activities and changes to same (Section 3.3 of this Appendix 2); payment provisions, including the schedule of payments; incentives, penalties and/or liquidated damages related to timely completion of construction (Section 3.2.1 of this Appendix 2); use of third party contractors; and responsibility for Costs, but only as between the Interconnection Customer and the Interconnected Transmission Owner that are parties to this Interconnection Construction Service Agreement; no other Interconnection Customer's responsibility for Costs may be affected (Section 217 of the Tariff). No other terms of the Tariff or this Appendix 2 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 Interconnection Construction Service Agreement.

3.2.3 Option to Build

3.2.3.1 Option:

Interconnection Customer shall have the option, ("Option to Build") to assume responsibility for the design, procurement, and construction of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades on the

dates specified in Schedule J (Schedule of Work) of this Agreement. Transmission Provider and Interconnection Customer must agree as to what constitutes Direct Connection Network Upgrades and identify such Direct Connection Network Upgrades in Schedule D (Option to Build) of this Agreement. If the Transmission Provider and Interconnection Customer disagree about whether a particular Network Upgrade is a Direct Connection Network Upgrade, the Transmission Provider must provide the Interconnection Customer with a written technical explanation outlining why the Transmission Provider does not consider the Network Upgrade to be a Direct Connection Network Upgrade within fifteen (15) days of its determination. Except for Direct Connection Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option. In order to exercise this Option to Build, Interconnection Customer must provide Transmission Provider and the Interconnected Transmission Owner with written notice of Interconnection Customer's election to exercise the option no later than thirty (30) days from the date the Interconnection Customer receives the results of the Facilities Study (or, if no Facilities Study was required, completion of the System Impact Study). Interconnection Customer may not elect Option to Build after such date.

3.2.3.2 General Conditions Applicable to Option:

In addition to the other terms and conditions applicable to the construction of facilities under this Appendix 2, the Option to Build is subject to the following conditions:

(a) If the Interconnection Customer assumes responsibility for the design, procurement and construction of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades:

(i) Interconnection Customer shall engineer, procure equipment, and construct Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by Transmission Owner;

(ii) Interconnection Customer's engineering, procurement and construction of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades shall comply with all requirements of law to which Interconnected Transmission Owner shall be subject in the engineering, procurement or construction of Interconnected Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades;

(iii) Interconnected Transmission Owner shall review and approve engineering design, equipment acceptance tests, and the construction of Interconnected Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades;

(iv) Prior to commencement of construction, Interconnection Customer shall provide to Interconnected Transmission Owner a schedule for construction of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct

Connection Network Upgrades and shall promptly respond to requests for information from Transmission Owner;

(v) At any time during construction, Interconnected Transmission Owner shall have the right to gain unrestricted access to Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades and to conduct inspections of the same;

(vi) At any time during construction, should any phase of the engineering, equipment procurement, or construction of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades not meet the standards and specifications provided by Interconnection Transmission Owner, Interconnection Customer shall be obligated to remedy deficiencies in that portion of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades;

*(*vii*) Interconnection Customer shall indemnify Interconnected Transmission Owner and Transmission Provider for claims arising from Interconnection Customer's construction of Transmission Owner Interconnection Facilities* that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades *under the terms and procedures applicable to Sections 12.1, 12.2, 12.3, and 12.4 of this Appendix 2.*

(viii) Interconnection Customer shall transfer control of Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades to Interconnected Transmission Owner;

(ix) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Transmission Owner Attachment Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades to Interconnected Transmission Owner;

(x) Interconnected Transmission Owner shall approve and accept for operation and maintenance Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades to the extent engineered, procured, and constructed in accordance with this ICSA, Appendix 2, section 3.2.3.2;

(xi) Interconnection Customer shall deliver to Transmission Owner "as-built" drawings, information, and any other documents that are reasonably required by Transmission Provider to assure that the Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades are built to the standards and specifications required by Transmission Provider; and

(xii) If Interconnection Customer exercises the Option to Build pursuant to section 3.2.3.1, Interconnection Customer shall pay Interconnected Transmission Owner the agreed upon amount of [$] for Interconnected Transmission Owner to execute the responsibilities enumerated to Interconnected Transmission Owner under section 3.2.3.2.

Interconnected Transmission Owner shall invoice Interconnection Customer for this total amount to be divided on a monthly basis pursuant to Interconnection Service Agreement, Tariff, Attachment O, Appendix 2, section 11.2.2.

(b) In addition to the General Conditions applicable to Option to Build set forth in section 3.2.3.2(a) above, the following conditions also apply:

(i) The Interconnection Customer must obtain or arrange to obtain all necessary permits and authorizations for the construction and installation of the Transmission Owner Interconnection Facilities that it is building, provided, however, that when the Interconnected Transmission Owner's assistance is required, the Interconnected Transmission Owner shall assist the Interconnection Customer in obtaining such necessary permits or authorizations with efforts similar in nature and extent to those that the Interconnected Transmission Owner typically undertakes in acquiring permits and authorizations for construction of facilities on its own behalf;

(ii) The Interconnection Customer must obtain all necessary land rights for the construction and installation of the Transmission Owner Interconnection Facilities that it is building, provided, however, that upon Interconnection Customer's reasonable request, the Interconnected Transmission Owner shall assist the Interconnection Customer in acquiring such land rights with efforts similar in nature and extent to those that the Interconnected Transmission Owner typically undertakes in acquiring land rights for construction of facilities on its own behalf;

(iii) Notwithstanding anything stated herein, each Interconnected 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 Interconnected Transmission Owner's existing facilities of any Transmission Owner Interconnection Facilities that the Interconnection Customer builds; and

(iv) The Transmission Owner Interconnection Facilities built by the Interconnection Customer shall be successfully inspected, tested and energized pursuant to Sections 3.8 and 3.9 of this Appendix 2.

3.2.3.3 Additional Conditions Regarding Network Facilities:

To the extent that the Interconnection Customer utilizes the Option to Build for design, procurement, construction and/or installation of (a) any Transmission Owner Interconnection Facilities that are Direct Connection Network Upgrades to Transmission System facilities that are in existence or under construction by or on behalf of the Interconnected Transmission Owner on the date that the Interconnection Customer solicits bids under Section 3.2.3.7 below, or (b) Transmission Owner Interconnection Facilities that are Transmission Owner Attachment Facilities and Direct Connection Network Upgrades that are to be located on land or in right-of-way owned or controlled by the Interconnected 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 2, all work shall comply with the following further conditions:

(i) All work performed by or on behalf of the Interconnection Customer shall be conducted by contractors, and using equipment manufacturers or vendors, that are listed on the Interconnected Transmission Owner's List of Approved Contractors;

(ii) The Interconnected 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 Interconnection Facilities built by or for the Interconnection Customer; and for acceptance testing of any equipment that will be owned and/or operated by the Interconnected Transmission Owner;

(iii) The Interconnected 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 Transmission Owner Attachment Facilities and Direct Connection Network 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 Interconnected Transmission Owner or any portion of the Transmission System, provided that, unless circumstances do not reasonably permit such consultations, the Interconnected Transmission Owner shall consult with the Interconnection Customer and with Transmission Provider before directing that work be stopped or ordering any corrective measures;

(iv) The Interconnection Customer and its contractors, employees and agents shall comply with the Interconnected 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 Interconnected Transmission Owner, provided that the Interconnected 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 Interconnection Customer within 20 Business Days after a request therefor made by Interconnection Customer following its receipt of the Facilities Study;

(v) The Interconnection 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 Interconnection 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.

3.2.3.4 Administration of Conditions:

To the extent that the Interconnected Transmission Owner exercises any discretion in the application of any of the conditions stated in Sections 3.2.3.2 and 3.2.3.3 of this Appendix 2, 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 Interconnection Customer may require for the purpose of complying with any of those conditions.

3.2.3.5 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 an Interconnection Customer, a Transmission Owner shall add to its List of Approved Contractors (1) any design or construction contractor regarding which the Interconnection 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 Interconnection 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.

3.2.3.6 Construction by Multiple Interconnection Customers:

In the event that there are multiple Interconnection Customers that wish to exercise an Option to Build with respect to Interconnection Facilities of the types described in Section 3.2.3.3 to this Appendix 2, the Transmission Provider shall determine how to allocate the construction responsibility among them unless they reach agreement among themselves on how to proceed.

3.2.3.7 Option Procedures:

(a) Within 10 days after notifying Transmission Provider and the Interconnected Transmission Owner of its election to exercise the Option to Build, Interconnection Customer shall solicit bids from one or more Approved Contractors named on the Interconnected Transmission Owner's List of Approved Contractors to procure equipment for, and/or to design,

construct and/or install, the Transmission Owner Interconnection Facilities that the Interconnection Customer seeks to build under the Option to Build on terms (i) that will meet the Interconnection Customer's proposed schedule; (ii) that, if the Interconnection Customer seeks to have an Approved Contractor construct or install Transmission Owner Attachment Facilities and Direct Connection Network Upgrades, will satisfy all of the conditions on construction specified in Sections 3.2.3.2 and 3.2.3.3 of this Appendix 2; and (iii) that will satisfy the obligations of a Constructing Entity (other than those relating to responsibility for the costs of facilities) under this Appendix 2.

(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 Interconnection Customer.

(c) Upon receipt of a qualifying bid acceptable to it, the Interconnection 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 Interconnection Customer in response to its solicitation, the Interconnected Transmission Owner(s) shall be responsible for the design, procurement, construction and installation of the Transmission Owner Interconnection Facilities in accordance with the Standard Option described in Section 3.2.1 of this Appendix 2.

3.2.3.8 Interconnection Customer Drawings:

Interconnection Customer shall submit to the Interconnected Transmission Owner and Transmission Provider initial drawings, certified by a professional engineer, of the Transmission Owner Interconnection Facilities s that Interconnection Customer arranges to build under this Option to Build. *The Interconnected Transmission Owner shall review and approve the initial drawings and engineering design of the Transmission Owner Interconnection Facilities to be constructed under the Option to Build.* The Interconnected Transmission Owner shall review the drawings to assess the consistency of Interconnection Customer's design of the pertinent Transmission Owner Interconnection Facilities with Applicable Standards and the Facilities Study. Interconnected Transmission Owner, with facilitation and oversight by Transmission Provider, shall provide comments on such drawings to Interconnection 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.

3.2.3.9 Effect of Review:

Interconnected Transmission Owner's review of Interconnection Customer's initial drawings of the Transmission Owner Interconnection Facilities that the Interconnection 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, Interconnection Customer shall make such changes to the design of the pertinent Transmission Owner Interconnection Facilities as may reasonably be required by Transmission Provider, in

consultation with the Interconnected Transmission Owner, to ensure that the Transmission Owner Interconnection Facilities that Interconnection Customer is building meet Applicable Standards and conform with the Facilities Study.

9.2 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 this 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 this Appendix 2, Interconnected Transmission Owner's oversight costs (i.e. costs incurred by the Interconnected Transmission Owner when engaging in oversight activities to satisfy itself that the Interconnection Customer is complying with the Interconnected Transmission Owner's standards and specifications for the construction of facilities) associated with the Interconnection Customer's building Transmission Owner Attachment Facilities and Direct Connection Network Upgrades, including but not limited to Costs for tie-in work and Cancellation Costs. Interconnected Transmission Owner's oversight costs shall be consistent with Tariff, Attachment P, Appendix 2, section 3.2.3.2(a)(12). 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 9.3 of this Appendix 2 shall govern the timing of the final cost reconciliation upon completion of the work.

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.

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.

New Service Customer shall have the option, ("Option to Build"), to design, procure, construct and install all or any portion of the Direct Assignment Facilities and/or Customer-Funded Upgrades that are Direct Connection Network Upgrades on the dates specified in Appendix I of this Agreement. Transmission Provider and New Service Customer must agree as to what constitutes Direct Connection Network Upgrades in Schedule C of this Agreement. If the Transmission Provider and New Service Customer disagree about whether a particular Network Upgrade is a Direct Connection Network Upgrade, the Transmission Provider must provide the New Service Customer a written technical explanation outlining why the Transmission Provider does not consider the Network Upgrade to be a Direct Connection Network Upgrade within fifteen (15) days of its determination. Transmission Provider and New Service Customer must agree as to what constitutes Direct Connection Network Upgrades and identify such Direct Connection Network Upgrades in Schedule C (Option to Build) of this Agreement. Except for

Direct Connection Network Upgrades, New Service Customer shall have no right to construct Network Upgrades under this option. 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 no later than thirty (30) days from the date the New Service Customer receives the results of the Facility Study (or, if no Facilities Study was required completion of the System Impact Study). New Service Customer may not elect Option to Build after such date. New Service Customer shall 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) If New Service Customer assumes responsibility for the design, procurement and construction of Direct Assignment Facilities and Customer-Funded Upgrades that are Direct Connection Network Upgrades:

(i) New Service Customer shall engineer, procure equipment, and construct Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by Interconnected Transmission Owner;

(ii) New Service Customer's engineering, procurement and construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades shall comply with all requirements of law to which Interconnected Transmission Owner shall be subject in the engineering, procurement or construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades;

(iii) Interconnected Transmission Owner shall review and approve engineering design, equipment acceptance tests, and the construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades;

(iv) Prior to commencement of construction, New Service Customer shall provide to Interconnected Transmission Owner a schedule for construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades and shall promptly respond to requests for information from Interconnected Transmission Owner;

(v) At any time during construction, Interconnected Transmission Owner shall have the right to gain unrestricted access to Direct Assignment Facilities and Customer-Funded Upgrades that are Direct Connection Network Upgrades and to conduct inspections of the same;

(vi) At any time during construction, should any phase of the engineering, equipment procurement, or construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades not meet the standards and specifications provided by Interconnected Transmission Owner, New Service Customer shall be

obligated to remedy deficiencies in that portion of Direct Assignment Facilities and Customer-Funded Upgrades that are Direct Connection Network Upgrades;

(vii) New Service Customer shall indemnify Interconnected Transmission Owner and Transmission Provider for claims arising from New Service Customer's construction of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades under the terms and procedures applicable to this Appendix III, sections 12.1, 12.2, 12.3, and 12.4;

(viii) New Service Customer shall transfer control of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades to Interconnected Transmission Owner;

(ix) Unless Parties otherwise agree, New Service Customer shall transfer ownership of Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades to Interconnected Transmission Owner;

(x) Interconnected Transmission Owner shall approve and accept for operation and maintenance Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades to the extent engineered, procured, and constructed in accordance with this ICSA, Appendix 2, section 3.2.3.2;

(xi) New Service Customer shall deliver to Transmission Owner "as-built" drawings, information, and any other documents that are reasonably required by Transmission Provider to assure that the Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network Upgrades are built to the standards and specifications required by Interconnected Transmission Owner; and

(xii) If New Service Customer exercises the Option to Build pursuant to section 6.2.1, New Service Customer shall pay Interconnected Transmission Owner the agreed upon amount of [$] for Interconnected Transmission Owner to execute the responsibilities enumerated to Interconnected Transmission Owner under section 6.2.2. Interconnected Transmission Owner shall invoice New Service Customer for this total amount to be divided on a monthly basis pursuant to Appendix III, section 9.3.

(b) 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 are Direct Connection Network 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;

(c) 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 are Direct Connection Network 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;

(d) 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 are Direct Connection Network Upgrades that the New Service Customer builds; and

(e) The Direct Assignment Facilities or Customer-Funded Upgrades that are Direct Connection Network 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) Direct Connection 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 Direct Connection Network Upgrades 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 that are Direct Connection Network 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 that are Direct Connection Network 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 Interconnected 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 Interconnected 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 Interconnected 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.

Interconnected 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.

7.0 Suspension of Work Upon Default.

Upon the occurrence of a Default by New Service Customer, the Transmission Provider or the Transmission Owner may, by written notice to New Service Customer, suspend further work associated with the Direct Assignment Facilities and/or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, Transmission Owner is responsible for constructing. Such suspension shall not constitute a waiver of any termination rights under this Section 7.0. In the event of a suspension by Transmission Provider or Transmission Owner, the New Service Customer shall be responsible for the Costs incurred in connection with any suspension hereunder.

7.1 Notification and Correction of Defects

7.1.1 In the event that inspection and/or testing of any Direct Assignment Facilities or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, built by Transmission Owner identifies any defects or failures to comply with Applicable Standards in such Direct Assignment Facilities or Customer-Funded Upgrades, then Transmission Owner shall take appropriate action to correct any such defects or failures within 20 days after it learns thereof. If such a defect or failure cannot reasonably be corrected within such 20-day period, Transmission Owner shall commence the necessary correction within that time and shall thereafter diligently pursue it to completion. Such acceptance does not modify and shall not limit the Interconnection Customer's indemnification obligations set forth in Tariff, Attachment P, Appendix 2, section 3.2.3(e).

9.0 Security, Billing And Payments

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

9.1 Recurring Charges Pursuant to Section 26:

The following provisions shall apply with respect to recurring charges applicable to a Merchant Network Upgrade pursuant to Section 26 of this Appendix III.

9.1.1 General:

Except as, and to the extent, otherwise provided in this Upgrade CSA, billing and payment of any recurring charges applicable to the Merchant Network Upgrade pursuant to Section 26 of this Appendix III shall be in accordance with Section 7 of the Tariff. Transmission Owner shall provide Transmission Provider with all necessary information and supporting data that Transmission Provider may reasonably require to administer billing for and payment of applicable charges under this Appendix III. Transmission Provider shall remit to Transmission Owner revenues received in payment of Transmission Owner's charges to Interconnection Customer under this Appendix III upon Transmission Provider's receipt of such revenues. At Transmission Provider's reasonable discretion, charges to Interconnection Customer and remittances to Transmission Owner under this Appendix III may be netted against amounts owed by or to such parties under the Tariff.

9.2 Adjustments to Security.

The Security provided by New Service Customer at or before the Effective Date of this Upgrade CSA shall be: (a) reduced as portions of the work on Direct Assignment Facilities or Customer-Funded Upgrades, identified in Appendix I to this Upgrade CSA, are completed; and/or (b) increased or decreased as required to reflect adjustments to New Service Customer's cost responsibility, to correspond with changes in the Scope of Work developed in accordance with Transmission Provider's scope change process for projects set forth in the PJM Manuals.

9.3 Invoice.

Interconnected Transmission Owner shall provide Transmission Provider a quarterly statement of its 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 Direct Assignment Facilities and/or Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA, or (b) in the event that the New Service Customer exercises the Option to Build pursuant to Section 6.2.1 of this Appendix III, for the Interconnected Transmission Owner's 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) associated with the New Service Customer's building Direct Assignment Facilities and Customer-Funded Upgrades that are Direct Connection Network Upgrades, including but not limited to Costs for tie-in work and

Cancellation Costs. Interconnected Transmission Owner's oversight costs shall be consistent with Attachment GG, Appendix III, section 6.2.2(a)(12). If New Services Customer exercises the Option to Build pursuant to Appendix III, section 6.2.1, New Services Customer shall pay Interconnected Transmission Owner costs associated with its responsibilities pursuant to section 6.2.1 and in accordance with the amount agreed to by the Interconnected Transmission Owner and New Services Customer pursuant to Appendix III, section 6.2.1(a)(12). Transmission Provider shall bill New Service Customer, on behalf of Interconnected Transmission Owner, for Interconnected Transmission Owner's expected costs during the subsequent three months. New Service Customer shall pay each bill within twenty (20) days after receipt thereof. Upon receipt of each of New Service Customer's payments of such bills, Transmission Provider shall reimburse the Interconnected Transmission Owner. New Service Customer may request that the Transmission Provider provide 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 this Appendix III shall govern the timing of the final cost reconciliation upon completion of the work.

9.4 Final Invoice.

Within 120 days after Transmission Owner completes construction and installation of the Direct Assignment Facilities and/or Customer-Funded Upgrades under this Upgrade CSA, Transmission Provider shall provide New Service Customer with 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 responsibility under the PJM Tariff for the Costs of the Direct Assignment Facilities and/or Customer-Funded Upgrades identified in Appendix I to this Upgrade CSA; and (b) New Service Customer's previous aggregate payments to Transmission Provider for the Costs of the facilities identified in Appendix I to this Upgrade CSA. Notwithstanding the foregoing, however, Transmission Provider shall not be obligated to make any payment to the New Service Customer or the 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 Party owing the payment.

9.5 Disputes.

In the event of a billing dispute among the Transmission Provider, Transmission Owner, and New Service Customer, Transmission Provider and the Transmission Owner shall continue to perform their respective obligations pursuant to this Upgrade CSA so long as: (a) the New Service Customer continues to make all payments not in dispute, and the Security held by the Transmission Provider while the dispute is pending exceeds the amount in dispute; or (b) the New Service Customer pays to Transmission Provider, or into an independent escrow account established by the New Service Customer, the portion of the invoice in dispute, pending resolution of such dispute. If the New Service Customer fails to meet any of these requirements, then Transmission Provider shall so inform the other Parties and Transmission Provider or the Transmission Owner may provide notice to New Service Customer of a Breach pursuant to Section 13 of this Appendix III.

9.6 Interest.

Interest on any unpaid, delinquent amounts shall be calculated in accordance with the methodology specified for interest on refunds in the FERC's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) and shall apply from the due date of the bill to the date of payment.

9.7 No Waiver.

Payment of an invoice shall not relieve New Service Customer from any other responsibilities or obligations it has under this Upgrade CSA, nor shall such payment constitute a waiver of any claims arising hereunder.

SCHEDULE C

TRANSMISSION OWNER INTERCONNECTION FACILITIES TO BE BUILT BY NEW SERVICE CUSTOMER PURSUANT TO OPTION TO BUILD

Section(s) of the
PJM Reliability Assurance Agreement

(Clean Format)

ARTICLE 1 – DEFINITIONS

Unless the context otherwise specifies or requires, capitalized terms used herein shall have the respective meanings assigned herein or in the Schedules hereto, or in the PJM Tariff or PJM Operating Agreement if not otherwise defined in this Agreement, for all purposes of this Agreement (such definitions to be equally applicable to both the singular and the plural forms of the terms defined). Unless otherwise specified, all references herein to Articles, Sections or Schedules, are to Articles, Sections or Schedules of this Agreement. As used in this Agreement:

Agreement:

"Agreement" shall mean this Reliability Assurance Agreement, together with all Schedules hereto, as amended from time to time.

Annual Demand Resource:

"Annual Demand Resource" shall mean a resource that is placed under the direction of the Office of the Interconnection during the Delivery Year, and will be available for an unlimited number of interruptions during such Delivery Year by the Office of the Interconnection, and will be capable of maintaining each such interruption between the hours of 10:00AM to 10:00PM Eastern Prevailing Time for the months of June through October and the following May, and 6:00AM through 9:00PM Eastern Prevailing Time for the months of November through April unless there is an Office of the Interconnection approved maintenance outage during October through April. The Annual Demand Resource must be available in the corresponding Delivery year to be offered for sale or Self-Supplied in an RPM Auction, or included as an Annual Demand Resource in an FRR Capacity Plan for the corresponding Delivery Year.

Annual Energy Efficiency Resource:

"Annual Energy Efficiency Resource" shall mean a project, including installation of more efficient devices or equipment or implementation of more efficient processes or systems, meeting the requirements of Reliability Assurance Agreement, Schedule 6 and exceeding then-current building codes, appliance standards, or other relevant standards, designed to achieve a continuous (during the summer and winter periods described in such Schedule 6 and the PJM Manuals) reduction in electric energy consumption that is not reflected in the peak load forecast prepared for the Delivery Year for which the Energy Efficiency Resource is proposed, and that is fully implemented at all times during such Delivery Year, without any requirement of notice, dispatch, or operator intervention.

Applicable Regional Entity:

"Applicable Regional Entity" shall have the same meaning as in the PJM Tariff.

Base Capacity Demand Resource:

"Base Capacity Demand Resource" shall mean, for the 2018/2019 and 2019/2020 Delivery

Years, a resource that is placed under the direction of the Office of the Interconnection and that will be available June through September of a Delivery Year, and will be available to the Office of the Interconnection for an unlimited number of interruptions during such months, and will be capable of maintaining each such interruption for at least a 10-hour duration between the hours of 10:00AM to 10:00PM Eastern Prevailing Time. The Base Capacity Demand Resource must be available June through September in the corresponding Delivery Year to be offered for sale or self-supplied in an RPM Auction, or included as a Base Capacity Demand Resource in an FRR Capacity Plan for the corresponding Delivery Year.

Base Capacity Energy Efficiency Resource:

"Base Capacity Energy Efficiency Resource" shall mean, for the 2018/2019 and 2019/2020 Delivery Years, a project, including installation of more efficient devices or equipment or implementation of more efficient processes or systems, meeting the requirements of RAA, Schedule 6 and exceeding then-current building codes, appliance standards, or other relevant standards, designed to achieve a continuous (during the summer peak periods as described in Reliability Assurance Agreement, Schedule 6 and the PJM Manuals) reduction in electric energy consumption that is not reflected in the peak load forecast prepared for the Delivery Year for which the Base Capacity Energy Efficiency Resource is proposed, and that is fully implemented at all times during such Delivery Year, without any requirement of notice, dispatch, or operator intervention.

Base Capacity Resource:

"Base Capacity Resource" shall have the same meaning as in Tariff, Attachment DD.

Base Residual Auction:

"Base Residual Auction" shall have the same meaning as in Tariff, Attachment DD.

Behind The Meter Generation:

"Behind The Meter Generation" shall refer to a generating unit that delivers energy to load without using the Transmission System or any distribution facilities (unless the entity that owns or leases the distribution facilities consented to such use of the distribution facilities and such consent has been demonstrated to the satisfaction of the Office of the Interconnection; provided, however, that Behind The Meter Generation does not include (i) at any time, any portion of such generating unit's capacity that is designated as a Capacity Resource or (ii) in any hour, any portion of the output of such generating unit that is sold to another entity for consumption at another electrical location or into the PJM Interchange Energy Market.

Black Start Capability:

"Black Start Capability" shall mean the ability of a generating unit or station to go from a shutdown condition to an operating condition and start delivering power without assistance from the power system.

Capacity Emergency Transfer Objective (CETO):

"Capacity Emergency Transfer Objective" or "CETO" shall mean the amount of electric energy that a given area must be able to import in order to remain within a loss of load expectation of one event in 25 years when the area is experiencing a localized capacity emergency, as determined in accordance with the PJM Manuals. Without limiting the foregoing, CETO shall be calculated based in part on EFORD determined in accordance with Reliability Assurance Agreement, Schedule 5, Paragraph C.

Capacity Emergency Transfer Limit (CETL):

Capacity Emergency Transfer Limit" or "CETL" shall mean the capability of the transmission system to support deliveries of electric energy to a given area experiencing a localized capacity emergency as determined in accordance with the PJM Manuals.

Capacity Import Limit:

For any Delivery Year up to and including the 2019/2020 Delivery Year, "Capacity Import Limit" shall mean, (a) for the PJM Region, (1) the maximum megawatt quantity of external Generation Capacity Resources that PJM determines for each Delivery Year, through appropriate modeling and the application of engineering judgment, the transmission system can receive, in aggregate at the interface of the PJM Region with all external balancing authority areas and deliver to load in the PJM Region under capacity emergency conditions without violating applicable reliability criteria on any bulk electric system facility of 100kV or greater, internal or external to the PJM Region, that has an electrically significant response to transfers on such interface, minus (2) the then-applicable Capacity Benefit Margin; and (b) for certain source zones identified in the PJM manuals as groupings of one or more balancing authority areas, (1) the maximum megawatt quantity of external Generation Capacity Resources that PJM determines the transmission system can receive at the interface of the PJM Region with each such source zone and deliver to load in the PJM Region under capacity emergency conditions without violating applicable reliability criteria on any bulk electric system facility of 100kV or greater, internal or external to the PJM Region, that has an electrically significant response to transfers on such interface, minus the then-applicable Capacity Benefit Margin times (2) the ratio of the maximum import quantity from each such source zone divided by the PJM total maximum import quantity. As more fully set forth in the PJM Manuals, PJM shall make such determination based on the latest peak load forecast for the studied period, the same computer simulation model of loads, generation and transmission topography employed in the determination of Capacity Emergency Transfer Limit for such Delivery Year, including external facilities from an industry standard model of the loads, generation, and transmission topography of the Eastern Interconnection under peak conditions. PJM shall specify in the PJM Manuals the areas and minimum distribution factors for identifying monitored bulk electric system facilities that have an electrically significant response to such transfers on the PJM interface. Employing such tools, PJM shall model increased power transfers from external areas into PJM to determine the transfer level at which one or more reliability criteria is violated on any monitored bulk electric system facilities that have an electrically significant response to such transfers. For the

PJM Region Capacity Import Limit, PJM shall optimize transfers from other source areas not experiencing any reliability criteria violations as appropriate to increase the Capacity Import Limit. The aggregate megawatt quantity of transfers into PJM at the point where any increase in transfers on the interface would violate reliability criteria will establish the Capacity Import Limit. Notwithstanding the foregoing, a Capacity Resource located outside the PJM Region shall not be subject to the Capacity Import Limit if the Capacity Market Seller seeks an exception thereto by demonstrating to PJM, by no later than five (5) business days prior to the commencement of the offer period for the relevant RPM Auction, that such resource meets all of the following requirements:

(i) it has, at the time such exception is requested, met all applicable requirements to be pseudo-tied into the PJM Region, or the Capacity Market Seller has committed in writing that it will meet such requirements, unless prevented from doing so by circumstances beyond the control of the Capacity Market Seller, prior to the relevant Delivery Year;

(ii) at the time such exception is requested, it has long-term firm transmission service confirmed on the complete transmission path from such resource into PJM; and

(iii) it is, by written commitment of the Capacity Market Seller, subject to the same obligations imposed on Generation Capacity Resources located in the PJM Region by Tariff, Attachment DD, section 6.6 to offer their capacity into RPM Auctions; provided, however, that (a) the total megawatt quantity of all exceptions granted hereunder for a Delivery Year, plus the Capacity Import Limit for the applicable interface determined for such Delivery Year, may not exceed the total megawatt quantity of Network External Designated Transmission Service on such interface that PJM has confirmed for such Delivery Year; and (b) if granting a qualified exception would result in a violation of the rule in clause (a), PJM shall grant the requested exception but reduce the Capacity Import Limit by the quantity necessary to ensure that the total quantity of Network External Designated Transmission Service is not exceeded.

Capacity Only Option:

"Capacity Only Option" shall mean participation in Emergency Load Response Program or Pre-Emergency Program which allows, pursuant to Tariff, Attachment DD and as applicable, a capacity payment for the ability to reduce load during a pre-emergency or emergency event.

Capacity Performance Resource:

"Capacity Performance Resource" shall have the same meaning as in Tariff, Attachment DD.

Capacity Resources:

"Capacity Resources" shall mean megawatts of (i) net capacity from Existing Generation Capacity Resources or Planned Generation Capacity Resources meeting the requirements of the Reliability Assurance Agreement, Schedules 9 and Reliability Assurance Agreement, Schedule 10 that are or will be owned by or contracted to a Party and that are or will be committed to satisfy that Party's obligations under the Reliability Assurance Agreement, or to satisfy the reliability requirements of the PJM Region, for a Delivery Year; (ii) net capacity from Existing

Generation Capacity Resources or Planned Generation Capacity Resources not owned or contracted for by a Party which are accredited to the PJM Region pursuant to the procedures set forth in such Schedules 9 and 10; or (iii) load reduction capability provided by Demand Resources or Energy Efficiency Resources that are accredited to the PJM Region pursuant to the procedures set forth in the Reliability Assurance Agreement, Schedule 6.

Capacity Transfer Right:

"Capacity Transfer Right" shall have the meaning specified in Tariff, Attachment DD.

Compliance Aggregation Area (CAA):

"Compliance Aggregation Area" or "CAA" shall have the same meaning as in the Tariff.

Consolidated Transmission Owners Agreement, PJM Transmission Owners Agreement or Transmission Owners Agreement:

"Consolidated Transmission Owners Agreement," "PJM Transmission Owners Agreement" or "Transmission Owners Agreement" shall mean that certain Consolidated Transmission Owners Agreement, dated as of December 15, 2005, by and among the Transmission Owners and by and between the Transmission Owners and PJM Interconnection, L.L.C. on file with the Commission, as amended from time to time.

Control Area:

"Control Area" shall mean an electric power system or combination of electric power systems bounded by interconnection metering and telemetry to which a common generation control scheme is applied in order to:

(a) match the power output of the generators within the electric power system(s) and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);

(b) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;

(c) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice and the criteria of NERC and each Applicable Regional Entity;

(d) maintain power flows on transmission facilities within appropriate limits to preserve reliability; and

(e) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

Daily Unforced Capacity Obligation:

"Daily Unforced Capacity Obligation" shall mean the capacity obligation of a Load Serving Entity during the Delivery Year, determined in accordance with the Reliability Assurance Agreement, Schedule 8 or, as to an FRR Entity, in the Reliability Assurance Agreement, Schedule 8.1.

Delivery Year:

"Delivery Year" shall mean a Planning Period for which a Capacity Resource is committed pursuant to the auction procedures specified in Tariff, Attachment DD or pursuant to an FRR Capacity Plan under RAA, Schedule 8.1.

Demand Resource (DR):

"Demand Resource" or "DR" shall mean a Limited Demand Resource, Extended Summer Demand Resource, Annual Demand Resource, Base Capacity Demand Resource or Summer-Period Demand Resource with a demonstrated capability to provide a reduction in demand or otherwise control load in accordance with the requirements of RAA, Schedule 6 that offers and that clears load reduction capability in a Base Residual Auction or Incremental Auction or that is committed through an FRR Capacity Plan.

Demand Resource Factor or DR Factor:

"Demand Resource Factor" or "DR Factor" shall mean, for Delivery Years through May 31, 2018, that factor approved from time to time by the PJM Board used to determine the unforced capacity value of a Demand Resource in accordance with Reliability Assurance Agreement, Schedule 6

Demand Resource Officer Certification Form:

"Demand Resource Officer Certification Form" shall mean a certification as to an intended Demand Resource Sell Offer, in accordance with Reliability Assurance Agreement, Schedule 6 and Reliability Assurance Agreement, Schedule 8.1 and the PJM Manuals.

Demand Resource Registration:

"Demand Resource Registration" shall mean a registration in the Full Program Option or Capacity Only Option of the Emergency or Pre-Emergency Load Resource Program in accordance with Tariff, Attachment K-Appendix, section 8.

Demand Resource Sell Offer Plan:

"Demand Resource Sell Offer Plan" shall mean the plan required by Reliability Assurance Agreement, Schedule 6 and Reliability Assurance Agreement, Schedule 8.1 in support of an

intended offer of Demand Resources in an RPM Auction, or an intended inclusion of Demand Resources in an FRR Capacity Plan.

Electric Cooperative:

"Electric Cooperative" shall mean an entity owned in cooperative form by its customers that is engaged in the generation, transmission, and/or distribution of electric energy.

Electric Distributor:

"Electric Distributor" shall mean a Member that 1) owns or leases with rights equivalent to ownership of electric distribution facilities that are used to provide electric distribution service to electric load within the PJM Region; or 2) is a generation and transmission cooperative or a joint municipal agency that has a member that owns electric distribution facilities used to provide electric distribution service to electric load within the PJM Region.

Emergency:

"Emergency" shall mean (i) an abnormal system condition requiring manual or automatic action to maintain system frequency, or to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property; or (ii) a fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel; or (iii) a condition that requires implementation of emergency procedures as defined in the PJM Manuals.

End-Use Customer:

"End-Use Customer" shall mean a Member that is a retail end-user of electricity within the PJM Region. For purposes of Members Committee sector classification, a Member that is a retail end-user that owns generation may qualify as an End-Use customer if: (1) the average physical unforced capacity owned by the Member and its affiliates in the PJM region over the five Planning Periods immediately preceding the relevant Planning Period does not exceed the average PJM capacity obligation for the Member and its affiliates over the same time period; or (2) the average energy produced by the Member and its affiliates within the PJM region over the five Planning Periods immediately preceding the relevant Planning Period does not exceed the average energy consumed by that Member and its affiliates within the PJM region over the same time period. The foregoing notwithstanding, taking retail service may not be sufficient to qualify a Member as an End-Use Customer.

Energy Efficiency Resource:

"Energy Efficiency Resource" shall mean a project, including installation of more efficient devices or equipment or implementation of more efficient processes or systems, meeting the requirements of RAA, Schedule 6 and exceeding then-current building codes, appliance standards, or other relevant standards, designed to achieve a continuous (during the periods

described in Reliability Assurance Agreement, Schedule 6 and the PJM Manuals) reduction in electric energy consumption that is not reflected in the peak load forecast prepared for the Delivery Year for which the Energy Efficiency Resource is proposed, and that is fully implemented at all times during such Delivery Year, without any requirement of notice, dispatch, or operator intervention. Annual Energy Efficiency Resources, Base Capacity Energy Efficiency Resources and Summer-Period Energy Efficiency Resources are types of Energy Efficiency Resources.

Existing Demand Resource:

"Existing Demand Resource" shall mean a Demand Resource for which the Demand Resource Provider has identified existing end-use customer sites that are registered for the current Delivery Year with PJM (even if not registered by such Demand Resource Provider) and that the Demand Resource Provider reasonably expects to have under a contract to reduce load based on PJM dispatch instructions by the start of the Delivery Year for which such resource is offered.

Existing Generation Capacity Resource:

"Existing Generation Capacity Resource" shall mean, for purposes of the must-offer requirement and mitigation of offers for any RPM Auction for a Delivery Year, a Generation Capacity Resource that, as of the date on which bidding commences for such auction: (a) is in service; or (b) is not yet in service, but has cleared any RPM Auction for any prior Delivery Year. A Generation Capacity Resource shall be deemed to be in service if interconnection service has ever commenced (for resources located in the PJM Region), or if it is physically and electrically interconnected to an external Control Area and is in full commercial operation (for resources not located in the PJM Region). The additional megawatts of a Generation Capacity Resource that is being, or has been, modified to increase the number of megawatts of available installed capacity thereof shall not be deemed to be an Existing Generation Capacity Resource until such time as those megawatts (a) are in service; or (b) are not yet in service, but have cleared any RPM Auction for any prior Delivery Year.

Extended Summer Demand Resource:

"Extended Summer Demand Resource" shall mean, for Delivery Years through May 31, 2018, and for FRR Capacity Plans Delivery Years through May 31, 2019, a resource that is placed under the direction of the Office of the Interconnection and that will be available June through October and the following May, and will be available for an unlimited number of interruptions during such months by the Office of the Interconnection, and will be capable of maintaining each such interruption for at least a 10-hour duration between the hours of 10:00AM to 10:00PM Eastern Prevailing Time. The Extended Summer Demand Resource must be available June through October and the following May in the corresponding Delivery Year to be offered for sale or Self-Supplied in an RPM Auction, or included as an Extended Summer Demand Resource in an FRR Capacity Plan for the corresponding Delivery Year.

Facilities Study Agreement:

"Facilities Study Agreement" shall have the same meaning as in Tariff, Part VI, section 206.

FERC or Commission:

"FERC" or "Commission" shall mean the Federal Energy Regulatory Commission or any successor federal agency, commission or department exercising jurisdiction over the Tariff, Operating Agreement and Reliability Assurance Agreement.

Firm Point-To-Point Transmission Service:

"Firm Point-To-Point Transmission Service" shall have the meaning specified in the Tariff.

Firm Service Level:

"Firm Service Level" or "FSL" of Price Responsive Demand for the 2022/2023 Delivery Year and subsequent Delivery Years shall mean the level, determined at a PRD Substation level, to which Price Responsive Demand shall be reduced during the Delivery Year when an Emergency Action that triggers a Performance Assessment Interval is declared and the Locational Marginal Price exceeds the price associated with such Price Responsive Demand identified by the PRD Provider in its PRD Plan. "Firm Service Level" or "FSL" of Demand Resource shall mean the pre-determined level for which an end-use customer's load shall be reduced, upon notification from the Curtailment Service Provider's market operations center or its agent.

Firm Transmission Service:

"Firm Transmission Service" shall mean transmission service that is intended to be available at all times to the maximum extent practicable, subject to an Emergency, an unanticipated failure of a facility, or other event beyond the control of the owner or operator of the facility or the Office of the Interconnection.

Fixed Resource Requirement Alternative or FRR Alternative:

"Fixed Resource Requirement Alternative" or "FRR Alternative" shall mean an alternative method for a Party to satisfy its obligation to provide Unforced Capacity hereunder, as set forth in the Reliability Assurance Agreement, Schedule 8.1.

Forecast Pool Requirement:

"Forecast Pool Requirement" or "FPR" shall mean the amount equal to one plus the unforced reserve margin (stated as a decimal number) for the PJM Region required pursuant to this Reliability Assurance Agreement, as approved by the PJM Board pursuant to Reliability Assurance Agreement, Schedule 4.1.

FRR Capacity Plan or FRR Plan:

"FRR Capacity Plan" or "FRR Plan" shall mean a long-term plan for the commitment of Capacity Resources *and Price Responsive Demand* to satisfy the capacity obligations of a Party that has elected the FRR Alternative, as more fully set forth in the Reliability Assurance Agreement, Schedule 8.1.

FRR Entity:

"FRR Entity" shall mean, for the duration of such election, a Party that has elected the FRR Alternative hereunder.

FRR Service Area:

"FRR Service Area" shall mean (a) the service territory of an IOU as recognized by state law, rule or order; (b) the service area of a Public Power Entity or Electric Cooperative as recognized by franchise or other state law, rule, or order; or (c) a separately identifiable geographic area that is: (i) bounded by wholesale metering, or similar appropriate multi-site aggregate metering, that is visible to, and regularly reported to, the Office of the Interconnection, or that is visible to, and regularly reported to an Electric Distributor and such Electric Distributor agrees to aggregate the load data from such meters for such FRR Service Area and regularly report such aggregated information, by FRR Service Area, to the Office of the Interconnection; and (ii) for which the FRR Entity has or assumes the obligation to provide capacity for all load (including load growth) within such area. In the event that the service obligations of an Electric Cooperative or Public Power Entity are not defined by geographic boundaries but by physical connections to a defined set of customers, the FRR Service Area in such circumstances shall be defined as all customers physically connected to transmission or distribution facilities of such Electric Cooperative or Public Power Entity within an area bounded by appropriate wholesale aggregate metering as described above.

Full Program Option:

"Full Program Option" shall mean participation in Emergency Load Response Program or Pre-Emergency Program which allows, pursuant to Tariff, Attachment DD and as applicable, (i) an energy payment for load reductions during a pre-emergency or emergency event, and (ii) a capacity payment for the ability to reduce load during a pre-emergency or emergency event.

Full Requirements Service:

"Full Requirements Service" shall mean wholesale service to supply all of the power needs of a Load Serving Entity to serve end-users within the PJM Region that are not satisfied by its own generating facilities.

Generation Capacity Resource:

"Generation Capacity Resource" shall mean a Generating Facility, or the contractual right to capacity from a specified Generating Facility, that meets the requirements of RAA, Schedule 9 and RAA, Schedule 10, and, for Generating Facilities that are committed to an FRR Capacity

Plan, that meets the requirements of RAA, Schedule 8.1. A Generation Capacity Resource may be an Existing Generation Capacity Resource or a Planned Generation Capacity Resource.

Generation Owner:

"Generation Owner" shall mean a Member that owns or leases with rights equivalent to ownership, or otherwise controls and operates one or more operating generation resources located in the PJM Region. The foregoing notwithstanding, for a planned generation resource to qualify a Member as a Generation Owner, such resource shall have cleared an RPM auction, and for Energy Resources, the resource shall have a FERC-jurisdictional interconnection agreement or wholesale market participation agreement within PJM. Purchasing all or a portion of the output of a generation resource shall not be sufficient to qualify a Member as a Generation Owner. For purposes of Members Committee sector classification, a Member that is primarily a retail end-user of electricity that owns generation may qualify as a Generation Owner if: (1) the generation resource is the subject of a FERC-jurisdictional interconnection agreement or wholesale market participation agreement within PJM; (2) the average physical unforced capacity owned by the Member and its affiliates over the five Planning Periods immediately preceding the relevant Planning Period exceeds the average PJM capacity obligation of the Member and its affiliates over the same time period; and (3) the average energy produced by the Member and its affiliates within PJM over the five Planning Periods immediately preceding the relevant Planning Period exceeds the average energy consumed by the Member and its affiliates within PJM over the same time period.

Generator Forced Outage:

"Generator Forced Outage" shall mean an immediate reduction in output or capacity or removal from service, in whole or in part, of a generating unit by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the facility, as specified in the relevant portions of the PJM Manuals. A reduction in output or removal from service of a generating unit in response to changes in market conditions shall not constitute a Generator Forced Outage.

Generator Maintenance Outage:

"Generator Maintenance Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit in order to perform repairs on specific components of the facility, if removal of the facility qualifies as a maintenance outage pursuant to the PJM Manuals.

Generator Planned Outage:

"Generator Planned Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit for inspection, maintenance or repair with the approval of the Office of the Interconnection in accordance with the PJM Manuals.

Good Utility Practice:

"Good Utility Practice" shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather is intended to include acceptable practices, methods, or acts generally accepted in the region; including those practices required by Federal Power Act Section 215(a)(4).

Incremental Auction:

"Incremental Auction" shall mean any of several auctions conducted for a Delivery Year after the Base Residual Auction for such Delivery Year and before the first day of such Delivery Year, including the First Incremental Auction, Second Incremental Auction, Third Incremental Auction, or Conditional Incremental Auction. Incremental Auctions (other than the Conditional Incremental Auction), shall be held for the purposes of:

(i) allowing Market Sellers that committed Capacity Resources in the Base Residual Auction for a Delivery Year, which subsequently are determined to be unavailable to deliver the committed Unforced Capacity in such Delivery Year (due to resource retirement, resource cancellation or construction delay, resource derating, EFORd increase, a decrease in the Nominated Demand Resource Value of a Planned Demand Resource, delay or cancellation of a Qualifying Transmission Upgrade, or similar occurrences) to submit Buy Bids for replacement Capacity Resources; and

(ii) allowing the Office of the Interconnection to reduce or increase the amount of committed capacity secured in prior auctions for such Delivery Year if, as a result of changed circumstances or expectations since the prior auction(s), there is, respectively, a significant excess or significant deficit of committed capacity for such Delivery Year, for the PJM Region or for an LDA.

IOU:

"IOU" shall mean an investor-owned utility with substantial business interest in owning and/or operating electric facilities in any two or more of the following three asset categories: generation, transmission, distribution.

Limited Demand Resource:

"Limited Demand Resource" shall mean, for Delivery Years through May 31, 2018, and for FRR Capacity Plans Delivery Years through May 31, 2019, a resource that is placed under the direction of the Office of the Interconnection and that will, at a minimum, be available for interruption for at least 10 Load Management Events during the summer period of June through September in the Delivery Year, and will be capable of maintaining each such interruption for at

least a 6-hour duration. At a minimum, the Limited Demand Resource shall be available for such interruptions on weekdays, other than NERC holidays, from 12:00PM (noon) to 8:00PM Eastern Prevailing Time. The Limited Demand Resource must be available during the summer period of June through September in the corresponding Delivery Year to be offered for sale or Self-Supplied in an RPM Auction, or included as a Limited Demand Resource in an FRR Capacity Plan for the corresponding Delivery Year.

Load Serving Entity or LSE:

"Load Serving Entity" or "LSE" shall mean any entity (or the duly designated agent of such an entity), including a load aggregator or power marketer, (i) serving end-users within the PJM Region, and (ii) that has been granted the authority or has an obligation pursuant to state or local law, regulation or franchise to sell electric energy to end-users located within the PJM Region. Load Serving Entity shall include any end-use customer that qualifies under state rules or a utility retail tariff to manage directly its own supply of electric power and energy and use of transmission and ancillary services.

Locational Reliability Charge:

"Locational Reliability Charge" shall mean the charge determined pursuant to Operating Agreement, Schedule 8.

Markets and Reliability Committee:

"Markets and Reliability Committee" shall mean the committee established pursuant to the Operating Agreement as a Standing Committee of the Members Committee.

Maximum Emergency Service Level:

"Maximum Emergency Service Level" or "MESL" of Price Responsive Demand for the 2017/2018 through the 2021/2022 Delivery Years shall mean the level, determined at a PRD Substation level, to which Price Responsive Demand shall be reduced during the Delivery Year when a Maximum Generation Emergency is declared and the Locational Marginal Price exceeds the price associated with such Price Responsive Demand identified by the PRD Provider in its PRD Plan.

Member:

"Member" shall have the meaning provided in the Operating Agreement.

Members Committee:

"Members Committee" shall mean the committee specified in Operating Agreement, section 8 composed of the representatives of all the Members.

NERC:

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

Network External Designated Transmission Service:

"Network External Designated Transmission Service" shall mean the quantity of network transmission service confirmed by PJM for use by a market participant to import power and energy from an identified Generation Capacity Resource located outside the PJM Region, upon demonstration by such market participant that it owns such Generation Capacity Resource, has an executed contract to purchase power and energy from such Generation Capacity Resource, or has a contract to purchase power and energy from such Generation Capacity Resource contingent upon securing firm transmission service from such resource.

Network Resources:

"Network Resources" shall have the meaning set forth in the PJM Tariff.

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.

Nominal PRD Value:

"Nominal PRD Value" shall mean, as to any PRD Provider, an adjustment, determined in accordance with *Reliability Assurance* Agreement, Schedule 6.1, to the peak-load forecast used to determine the quantity of capacity sought through an RPM Auction, reflecting the aggregate effect of Price Responsive Demand on peak load resulting from the Price Responsive Demand to be provided by such PRD Provider.

Nominated Demand Resource Value:

"Nominated Demand Resource Value" shall have the meaning specified in Tariff, Attachment DD.

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, and electric distribution companies to serve load.

Obligation Peak Load:

"Obligation Peak Load" shall have the meaning specified in *Reliability Assurance* Agreement, Schedule 8.

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.

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

"Operating Agreement of the PJM Interconnection, L.L.C.," "Operating Agreement" or "PJM 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, on file with the Commission.

Operating Day:

"Operating Day" shall have the same meaning as provided in the Operating Agreement.

Operating Reserve:

"Operating Reserve" shall mean the amount of generating capacity scheduled to be available for a specified period of an Operating Day to ensure the reliable operation of the PJM Region, as specified in the PJM Manuals.

Other Supplier:

"Other Supplier" shall mean a Member that: (i) is engaged in buying, selling or transmitting electric energy, capacity, ancillary services, Financial Transmission Rights or other services available under PJM's governing documents in or through the Interconnection or has a good faith intent to do so, and (ii) is not a Generation Owner, Electric Distributor, Transmission Owner or End-Use Customer.

Partial Requirements Service:

"Partial Requirements Service" shall mean wholesale service to supply a specified portion, but not all, of the power needs of a Load Serving Entity to serve end-users within the PJM Region that are not satisfied by its own generating facilities.

Party:

"Party" shall mean an entity bound by the terms of the Operating Agreement.

Peak Shaving Adjustment:

"Peak Shaving Adjustment" shall mean a load forecast mechanism that allows load reductions by end-use customers to result in a downward adjustment of the summer load forecast for the associated Zone. Any End-Use Customer identified in an approved peak shaving plan shall not also participate in PJM Markets as Price Responsive Demand, Demand Resource, Base Capacity Demand Resource, Capacity Performance Demand Resource, or Economic Load Response Participant.

Performance Assessment Interval:

"Performance Assessment Interval" shall have the meaning specified in Tariff, Attachment DD.

Percentage Internal Resources Required:

"Percentage Internal Resources Required" shall mean, for purposes of an FRR Capacity Plan, the percentage of the LDA Reliability Requirement for an LDA that must be satisfied with Capacity Resources located in such LDA.

PJM:

"PJM" shall mean PJM Interconnection, L.L.C., including the Office of the Interconnection as referenced in the PJM Operating Agreement. When such term is being used in the RAA it shall also include the PJM Board.

PJM Board:

"PJM Board" shall mean the Board of Managers of the LLC, acting pursuant to the Operating Agreement, except when such term is being used in Tariff, Attachment M, 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 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.

PJM Tariff, Tariff, O.A.T.T., OATT or PJM Open Access Transmission Tariff:

"PJM Tariff," "Tariff," "O.A.T.T., "OATT" or "PJM Open Access Transmission 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 Region:

"PJM Region" shall have the same meaning as provided in the Operating Agreement.

PJM Region Installed Reserve Margin:

"PJM Region Installed Reserve Margin" shall mean the percent installed reserve margin for the PJM Region required pursuant to *Reliability Assurance Agreement,* Schedule 4.1, as approved by the PJM Board .

Planned Demand Resource:

"Planned Demand Resource" shall mean any Demand Resource that does not currently have the capability to provide a reduction in demand or to otherwise control load, but that is scheduled to be capable of providing such reduction or control on or before the start of the Delivery Year for which such resource is to be committed, as determined in accordance with the requirements of *Reliability Assurance* Agreement, Schedule 6. As set forth in *Reliability Assurance* Agreement, Schedule 6 and *Reliability Assurance* Agreement, Schedule 8.1, a Demand Resource Provider submitting a DR Sell Offer Plan shall identify as Planned Demand Resources in such plan all Demand Resources in excess of those that qualify as Existing Demand Resources.

Planned External Generation Capacity Resource:

"Planned External Generation Capacity Resource" shall mean a proposed Generation Capacity Resource, or a proposed increase in the capability of a Generation Capacity Resource, that (a) is to be located outside the PJM Region, (b) participates in the generation interconnection process of a Control Area external to PJM, (c) is scheduled to be physically and electrically interconnected to the transmission facilities of such Control Area on or before the first day of the Delivery Year for which such resource is to be committed to satisfy the reliability requirements of the PJM Region, and (d) is in full commercial operation prior to the first day of such Delivery Year, such that it is sufficient to provide the Installed Capacity set forth in the Sell Offer forming the basis of such resource's commitment to the PJM Region. Prior to participation in any Base Residual Auction for such Delivery Year, the Capacity Market Seller must demonstrate that it has a fully executed system impact study agreement (or other documentation which is functionally equivalent to a System Impact Study Agreement under the PJM Tariff) or, for resources which are greater than 20MWs participating in a Base Residual Auction for the 2019/2020 Delivery Year and subsequent Delivery Years, an agreement or other documentation which is functionally equivalent to a Facilities Study Agreement under the PJM Tariff), with the transmission owner to whose transmission facilities or distribution facilities the resource is being directly connected, and, as applicable, the transmission provider. Prior to participating in any Incremental Auction for such Delivery Year, the Capacity Market Seller must demonstrate it has entered into an interconnection agreement, or such other documentation that is functionally equivalent to an Interconnection Service Agreement under the PJM Tariff, with the transmission owner to whose transmission facilities or distribution facilities the resource is being directly connected, and, as applicable, the transmission provider. A Planned External Generation Capacity Resource must provide evidence to PJM that it has been studied as a Network Resource, or such other similar interconnection product in such external Control Area, must

provide contractual evidence that it has applied for or purchased transmission service to be deliverable to the PJM border, and must provide contractual evidence that it has applied for transmission service to be deliverable to the bus at which energy is to delivered, the agreements for which must have been executed prior to participation in any Reliability Pricing Model Auction for such Delivery Year. Any such resource shall cease to be considered a Planned External Generation Capacity Resource as of the earlier of (i) the date that interconnection service commences as to such resource; or (ii) the resource has cleared an RPM Auction, in which case it shall become an Existing Generation Capacity Resource for purposes of the mitigation of offers for any RPM Auction for all subsequent Delivery Years.

Planned Generation Capacity Resource:

"Planned Generation Capacity Resource" shall mean a Generation Capacity Resource, or additional megawatts to increase the size of a Generation Capacity Resource that is being or has been modified to increase the number of megawatts of available installed capacity thereof, participating in the generation interconnection process under Tariff, Part IV, Subpart A, as applicable, for which: (i) Interconnection Service is scheduled to commence on or before the first day of the Delivery Year for which such resource is to be committed to RPM or to an FRR Capacity Plan; (ii) for any such resource seeking to offer into a Base Residual Auction, or for any such resource of 20 MWs or less seeking to offer into a Base Residual Auction, a System Impact Study Agreement (or, for resources for which a System Impact Study Agreement is not required, has such other agreement or documentation that is functionally equivalent to a System Impact Study Agreement) has been executed prior to the Base Residual Auction for such Delivery Year; (iii) for any such resource of more than 20 MWs seeking to offer into a Base Residual Auction for the 2019/2020 Delivery Year and subsequent Delivery Years, a Facilities Study Agreement (or, for resources for which a Facilities Study Agreement is not required, has such other agreement or documentation that is functionally equivalent to a Facility Studies Agreement) has been executed prior to the Base Residual Auction for such Delivery Year; (iv) an Interconnection Service Agreement has been executed prior to any Incremental Auction for such Delivery Year in which such resource plans to participate; and (iv) no megawatts of capacity have cleared an RPM Auction for any prior Delivery Year. For purposes of the must-offer requirement and mitigation of offers for any RPM Auction for a Delivery Year, a Generation Capacity Resource shall cease to be considered a Planned Generation Capacity Resource as of the earlier of (i) the date that Interconnection Service commences as to such resource; or (ii) the resource has cleared an RPM Auction for any Delivery Year, in which case it shall become an Existing Generation Capacity Resource for any RPM Auction for all subsequent Delivery Years.

Planning Period:

"Planning Period" shall mean the 12 months beginning June 1 and extending through May 31 of the following year, or such other period approved by the Members Committee.

PRD Curve:

"PRD Curve" shall mean a price-consumption curve at a PRD Substation level, if available, and otherwise at a Zonal (or sub-Zonal LDA, if applicable) level, that details the base consumption level of Price Responsive Demand and the decreasing consumption levels at increasing prices.

PRD Provider:

"PRD Provider" shall mean (i) a Load Serving Entity that provides PRD; or (ii) an entity without direct load serving responsibilities that has entered contractual arrangements with end-use customers served by a Load Serving Entity that satisfy the eligibility criteria for Price Responsive Demand.

PRD Provider's Zonal Expected Peak Load Value of PRD:

"PRD Provider's Zonal Expected Peak Load Value of PRD" shall mean the expected contribution to Delivery Year peak load of a PRD Provider's Price Responsive Demand, were such demand not to be reduced in response to price, based on the contribution of the end-use customers comprising such Price Responsive Demand to the most recent prior Delivery Year's peak demand, escalated to the Delivery Year in question, as determined in a manner consistent with the Office of the Interconnection's load forecasts used for purposes of the RPM Auctions.

PRD Reservation Price:

"PRD Reservation Price" shall mean an RPM Auction clearing price identified in a PRD Plan for Price Responsive Demand load below which the PRD Provider desires not to commit the identified load as Price Responsive Demand.

PRD Substation:

"PRD Substation" shall mean an electrical substation that is located in the same Zone or in the same sub-Zonal LDA as the end-use customers identified in a PRD Plan or PRD registration and that, in terms of the electrical topography of the Transmission Facilities comprising the PJM Region, is as close as practicable to such loads**.**

Price Responsive Demand:

"Price Responsive Demand" or "PRD" shall mean end-use customer load registered by a PRD Provider pursuant to *Reliability Assurance Agreement,* Schedule 6.1 that have, as set forth in more detail in the PJM Manuals, the metering capability to record electricity consumption at an interval of one hour or less, Supervisory Control capable of curtailing such load (consistent with applicable RERRA requirements) at each PRD Substation identified in the relevant PRD Plan or PRD registration in response to a Maximum Generation Emergency declared by the Office of the Interconnection *(prior to 2022/2023 Delivery Year) or a Performance Assessment Interval that triggers a PRD performance assessment (effective with 2022/2023 Delivery Year)*, and a retail rate structure, or equivalent contractual arrangement, capable of changing retail rates as frequently as an hourly basis, that is linked to or based upon changes in real-time Locational

Marginal Prices at a PRD Substation level and that results in a predictable automated response to varying wholesale electricity prices.

Price Responsive Demand Credit:

"Price Responsive Demand Credit" shall mean a credit, based on committed Price Responsive Demand, as determined under *Reliability Assurance* Agreement, Schedule 6.1.

Price Responsive Demand Plan or PRD Plan:

"Price Responsive Demand Plan" or "PRD Plan" shall mean a plan, submitted by a PRD Provider and received by the Office of the Interconnection in accordance with *Reliability Assurance* Agreement, Schedule 6.1 and procedures specified in the PJM Manuals, claiming a peak demand limitation due to Price Responsive Demand to support the determination of such PRD Provider's Nominal PRD Value.

Public Power Entity:

"Public Power Entity" shall mean any agency, authority, or instrumentality of a state or of a political subdivision of a state, or any corporation wholly owned by any one or more of the foregoing, that is engaged in the generation, transmission, and/or distribution of electric energy.

Qualifying Transmission Upgrades:

"Qualifying Transmission Upgrades" shall have the meaning specified in Tariff, Attachment DD.

Relevant Electric Retail Regulatory Authority:

"Relevant Electric Retail Regulatory Authority" or "RERRA" shall have the meaning specified in the PJM Operating Agreement.

Reliability Principles and Standards:

"Reliability Principles and Standards" shall mean the principles and standards established by NERC or an Applicable Regional Entity to define, among other things, an acceptable probability of loss of load due to inadequate generation or transmission capability, as amended from time to time.

Required Approvals:

"Required Approvals" shall mean all of the approvals required for the Operating Agreement to be modified or to be terminated, in whole or in part, including the acceptance for filing by FERC and every other regulatory authority with jurisdiction over all or any part of the Operating Agreement.

Self-Supply:

"Self-Supply" shall have the meaning provided in Tariff, Attachment DD.

Small Commercial Customer:

"Small Commercial Customer" shall have the same meaning as in the PJM Tariff.

State Consumer Advocate:

"State Consumer Advocate" shall mean a legislatively created office from any State, all or any part of the territory of which is within the PJM Region, and the District of Columbia established, inter alia, for the purpose of representing the interests of energy consumers before the utility regulatory commissions of such states and the District of Columbia and the FERC.

State Regulatory Structural Change:

"State Regulatory Structural Change" shall mean as to any Party, a state law, rule, or order that, after September 30, 2006, initiates a program that allows retail electric consumers served by such Party to choose from among alternative suppliers on a competitive basis, terminates such a program, expands such a program to include classes of customers or localities served by such Party that were not previously permitted to participate in such a program, or that modifies retail electric market structure or market design rules in a manner that materially increases the likelihood that a substantial proportion of the customers of such Party that are eligible for retail choice under such a program (a) that have not exercised such choice will exercise such choice; or (b) that have exercised such choice will no longer exercise such choice, including for example, without limitation, mandating divestiture of utility-owned generation or structural changes to such Party's default service rules that materially affect whether retail choice is economically viable.

Summer-Period Demand Resource:

Summer-Period Demand Resource shall mean, for the 2020/2021 Delivery Year and subsequent Delivery Years, a resource that is placed under the direction of the Office of the Interconnection, and will be available June through October and the following May of the Delivery Year, and will be available for an unlimited number of interruptions during such months by the Office of the Interconnection, and will be capable of maintaining each such interruption between the hours of 10:00AM to 10:00PM Eastern Prevailing Time. The Summer-Period Demand Resource must be available June through October and the following May in the corresponding Delivery Year to be offered for sale in an RPM Auction, or included as a Summer-Period Demand Resource in an FRR Capacity Plan for the corresponding Delivery Year.

Summer-Period Energy Efficiency Resource:

Summer-Period Energy Efficiency Resource shall mean, for the 2020/2021 Delivery Year and subsequent Delivery Years, a project, including installation of more efficient devices or equipment or implementation of more efficient processes or systems, meeting the requirements

of Reliability Assurance Agreement, Schedule 6 and exceeding then-current building codes, appliance standards, or other relevant standards, designed to achieve a continuous (during the summer peak periods as described in Reliability Assurance Agreement, Schedule 6 and the PJM Manuals) reduction in electric energy consumption that is not reflected in the peak load forecast prepared for the Delivery Year for which the Summer-Period Energy Efficiency Resource is proposed, and that is fully implemented at all times during such Delivery Year, without any requirement of notice, dispatch, or operator intervention.

Supervisory Control:

"Supervisory Control" shall mean the capability to curtail, in accordance with applicable RERRA requirements, load registered as Price Responsive Demand at each PRD Substation identified in the relevant PRD Plan or PRD registration in response to a Maximum Generation Emergency declared by the Office of the Interconnection. Except to the extent automation is not required by the provisions of the Operating Agreement, the curtailment shall be automated, meaning that load shall be reduced automatically in response to control signals sent by the PRD Provider or its designated agent directly to the control equipment where the load is located without the requirement for any action by the end-use customer.

Threshold Quantity:

"Threshold Quantity" shall mean, as to any FRR Entity for any Delivery Year, the sum of (a) the Unforced Capacity equivalent (determined using the Pool-Wide Average EFORD) of the Installed Reserve Margin for such Delivery Year multiplied by the Preliminary Forecast Peak Load for which such FRR Entity is responsible under its FRR Capacity Plan for such Delivery Year, plus (b) the lesser of (i) 3% of the Unforced Capacity amount determined in (a) above or (ii) 450 MW. If the FRR Entity is not responsible for all load within a Zone, the Preliminary Forecast Peak Load for such entity shall be the FRR Entity's Obligation Peak Load last determined prior to the Base Residual Auction for such Delivery Year, times the Base FRR Scaling Factor (as determined in accordance with *Reliability Assurance* Agreement, Schedule 8.1).

Transmission Facilities:

"Transmission Facilities" shall mean facilities that: (i) are within the PJM Region; (ii) meet the definition of transmission facilities pursuant to FERC's Uniform System of Accounts or have been classified as transmission facilities in a ruling by FERC addressing such facilities; and (iii) have been demonstrated to the satisfaction of the Office of the Interconnection to be integrated with the PJM Region transmission system and integrated into the planning and operation of the PJM Region to serve all of the power and transmission customers within the PJM Region.

Transmission Owner:

"Transmission Owner" shall mean a Member that owns or leases with rights equivalent to ownership Transmission Facilities and is a signatory to the PJM Transmission Owners

Agreement. Taking transmission service shall not be sufficient to qualify a Member as a Transmission Owner.

Unforced Capacity:

"Unforced Capacity" shall mean installed capacity rated at summer conditions that is not on average experiencing a forced outage or forced derating, calculated for each Capacity Resource on the 12-month period from October to September without regard to the ownership of or the contractual rights to the capacity of the unit.

Winter Peak Load (or WPL):

"Winter Peak Load" or "WPL" shall mean the average of the Demand Resource *or PRD* customer's specific peak hourly load between hours ending 7:00 EPT through 21:00 EPT on the PJM defined 5 coincident peak days from December through February two Delivery Years prior the Delivery Year for which the registration is submitted. Notwithstanding, if the average use between hours ending 7:00 EPT through 21:00 EPT on a winter 5 coincident peak day is below 35% of the average hours ending 7:00 EPT through 21:00 EPT over all five of such peak days, then up to two such days and corresponding peak demand values may be excluded from the calculation. Upon approval by the Office of the Interconnection, a Curtailment Service Provider may provide alternative data to calculate Winter Peak Load, as outlined in the PJM Manuals, when there is insufficient hourly load data for the two Delivery Years prior to the relevant Delivery Year or if more than two days meet the exclusion criteria described above.

Zonal Capacity Price:

"Zonal Capacity Price" shall mean the clearing price required in each Zone to meet the demand for Unforced Capacity and satisfy Locational Deliverability Requirements for the LDA or LDAs associated with such Zone. If the Zone contains multiple LDAs with different Capacity Resource Clearing Prices, the Zonal Capacity Price shall be a weighted average of the Capacity Resource Clearing Prices for such LDAs, weighted by the Unforced Capacity of Capacity Resources cleared in each such LDA.

Zone or Zonal:

"Zone" or "Zonal" shall refer to an area within the PJM Region, as set forth in Tariff, Attachment J and RAA, Schedule 15, or as such areas may be (i) combined as a result of mergers or acquisitions or (ii) added as a result of the expansion of the boundaries of the PJM Region. A Zone shall include any Non-Zone Network Load located outside the PJM Region that is served from such Zone under Tariff, Attachment H-A.

Zonal Winter Weather Adjustment Factor (ZWWAF):

"Zonal Winter Weather Adjustment Factor" or "ZWWAF" shall mean the PJM zonal winter weather normalized coincident peak divided by PJM zonal average of 5 coincident peak loads in December through February.