

November 1, 2010

Via Electronic Filing

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. ER11- 1987-000
Ministerial Filing to Reflect Tariff and Operating Agreement Language
Accepted in Docket No. ER10-1196-000 in Electronic Tariff

Dear Ms. Bose:

I. Background and Description of Filing

On May 5, 2010, in Docket No. ER10-1196-000, PJM Interconnection, L.L.C. (“PJM”), on behalf of itself and a to be formed entity, PJM Settlement, Inc. (“PJMSettlement”), submitted for filing pursuant to section 205 of the Federal Power Act (“FPA”),¹ for effectiveness on January 1, 2011, revisions to the PJM Open Access Transmission Tariff (“Tariff”) and the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. (“Operating Agreement”) clarifying the counterparty to transactions in the PJM markets (“May 5 Filing”). On September 3, 2010, the Commission issued an order conditionally accepting the tariff revisions, to become effective January 1, 2011, subject to PJM making a compliance filing.²

Since the May 5 Filing, PJM submitted its baseline electronic tariff filing to comply with Order No. 714³ on September 17, 2010, in Docket No. ER10-2710.⁴ In

¹ 16 U.S.C. § 824d.

² *PJM Interconnection, L.L.C.*, 132 FERC ¶ 61,207 (2010) (“September 3 Order”).

³ *Electronic Tariff Filings*, Order No. 714, III FERC Stats. & Regs., Regs. Preambles ¶ 31,276 (2008), *as amended* October 23, 2009 (“Order No. 714”).

⁴ PJM’s baseline electronic tariff for the Tariff and Operating Agreement is currently pending before the Commission.

Order No. 714, the Commission directed that utilities with tariff revisions that are pending at the time the utility filed its baseline electronic tariff should not file the pending or suspended tariff sections as part of the baseline tariff filing. Rather, utilities were directed to re-file the pending tariff provisions as a compliance filing through the eTariff portal, in electronic tariff filing format, for inclusion in the database after the pending revisions have been accepted by the Commission.⁵

The May 5 Filing tariff revisions were conditionally accepted by the September 3 Order, effective January 1, 2011. Because those tariff revisions were not effective on September 17, 2010, the revisions were not included in PJM's September 17, 2010 baseline filing of the then-effective PJM Tariff and Operating Agreement. Therefore, prior to January 1, 2011, PJM is required to submit a separate ministerial compliance filing to incorporate the Tariff and Operating Agreement revisions accepted by the September 3 Order into the electronic version of the PJM Tariff and Operating Agreement.

PJM submits this ministerial filing to incorporate into its electronic tariff a portion of the revisions submitted in the May 5 Filing and accepted by the September 3 Order. PJM is filing those sections of the revisions accepted by the September 3 Order that involve sections of the PJM Tariff and Operating Agreement that are being further revised in a concurrent filing being made today.

Specifically, PJM is filing the previously accepted revisions to the PJM Tariff section 6A, Schedule 9, Attachment K-Appendix sections 5.4 and 7.2, and Attachment Q; and Operating Agreement sections 3.3 and 15.2, and Schedule 1 sections 5.4, 5.5, and 7.2.

Prior to January 1, 2011, PJM will submit an additional separate ministerial compliance filing to incorporate the rest of the PJM Tariff and Operating Agreement revisions accepted by the September 3 Order into the electronic version of the PJM Tariff and Operating Agreement.

This ministerial filing makes no substantive modifications to the PJM Tariff or Operating Agreement that have not already been accepted by the Commission.

II. Effective Date

PJM requests that the ministerial revisions included in this filing be made effective January 1, 2011, consistent with the effective date granted by the September 3 Order.

⁵ Order No. 714 at P 96.

III. Documents Enclosed

This filing consists of: (i) this transmittal letter; and (ii) portions of the PJM Tariff and Operating Agreement incorporating previously accepted tariff revisions into the electronic version of the PJM Tariff and Operating Agreement (in non-redlined format and redlined format in electronic tariff filing format as required by Order No. 714), specifically, Tariff sections 6A; Schedule 9; Attachment K-Appendix sections 5.4 and 7.2; and Attachment Q; and Operating Agreement sections 3.3, 15.2, and Schedule 1 sections 5.4, 5.5, and 7.2.

IV. Communications

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

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V. 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. Electronic service is permitted as of November 3, 2008, under the Commission's regulations⁶ pursuant to Order No. 714 and the Commission's Notice of Effectiveness of Regulations issued on October 28, 2008, in Docket No. RM01-5-000. In compliance with these regulations, PJM will post a copy of this filing to the FERC filings section of

⁶ See 18 CFR §§ 35.2, 154.2, 154.208 and 341.2.

its internet site, located at the following link: <http://www.pjm.com/documents/ferc-manuals/ferc-filings.aspx> with a specific link to the newly-filed document, and will send an e-mail on the same date as this filing to all PJM Members and all state utility regulatory commissions in the PJM Region⁷ alerting them that this filing has been made by PJM today and is available by following such link. PJM also is serving electronic copies of this filing on all persons listed on the Commission's official service list for Docket No. ER10-1196.

VI. Conclusion

For the foregoing reasons, PJM respectfully requests that the Commission accept for filing the proposed revisions to the PJM Tariff and Operating Agreement, previously accepted by the Commission, with an effective date of January 1, 2011.

Respectfully submitted,

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⁷ PJM already maintains, updates and regularly uses e-mail lists for all PJM members and affected commissions.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Commission Secretary in Docket No. ER10-1196-000.

Dated at Washington, D.C., this 1st day of November, 2010.

/s/ Deborah C. Brentani
Deborah C. Brentani

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PJM Tariff

Section 6A

(Redline Version)

6A Counterparty

- 6A.1** PJM administers the Tariff and the Operating Agreement. Under the Tariff and Operating Agreement, PJM administers the provision of transmission service and associated ancillary services to customers and operates and administers various centralized electric power and energy markets. In obtaining transmission service and in these centralized markets, customers conduct transactions with PJMSettlement as a counterparty. Market participants also may conduct bilateral transactions with other market participants and they may self-supply power and energy to the electric loads they serve. Such bilateral and self-supply arrangements are not transactions with PJMSettlement.
- 6A.2** For purposes of contracting with customers and conducting financial settlements regarding the use of the transmission capacity of the Transmission System, PJM has established PJMSettlement. PJM also has established PJMSettlement as the entity that is the Counterparty with respect to the agreements and transactions in the centralized markets that the Transmission Provider administers under the Tariff and the Operating Agreement (i.e., the agreements and transactions that are not bilateral arrangements between market participants or self-supply). PJMSettlement will serve as the Counterparty to Financial Transmission Rights and Auction Revenue Rights instruments held by a Market Participant. Any subsequent bilateral transfer of these instruments by the Market Participant to another Market Participant shall require the consent of PJM, but shall not implicate PJMSettlement as a contracting party with respect to such subsequent bilateral transfer.
- 6A.3** As a party to the Consolidated Transmission Owners Agreement, PJM has acquired the right to use the transmission capacity of the Transmission System that is required to provide service under this Tariff and the authorization to resell transmission service using such capacity on the Transmission System. Under the Consolidated Transmission Owners Agreement, PJM compensates the Transmission Owners for the use of their transmission capacity by distributing certain revenues to the Transmission Owners as set forth in the Tariff and the Consolidated Transmission Owners Agreement. PJM has assigned its right to use the transmission capacity of the Transmission System to PJMSettlement. Accordingly, PJMSettlement shall compensate the Transmission Owners for the use of the transmission capacity required to provide service under this Tariff.
- 6A.4** Unless otherwise expressly stated in the Tariff or the Operating Agreement, PJMSettlement shall be the Counterparty to the customers purchasing Transmission Service and Network Integration Transmission

Service, and to the other transactions with customers and other entities under the Tariff.

6A.5 PJMSettlement shall not be a contracting party to other non-transmission transactions that are (i) bilateral transactions between market participants reported to the Transmission Provider, and (ii) self-supplied or self-scheduled transactions reported to the Transmission Provider.

6A.6 Notwithstanding the foregoing, PJMSettlement shall not be the Counterparty with respect to agreements and transactions regarding the Transmission Provider's administration of Parts IV and VI, Schedules 1, 9, 10-NERC, 10-RFC, 14, and 16 of the PJM Tariff.

6A.7 Confidentiality. PJMSettlement shall be bound by the same confidentiality requirements as the Transmission Provider.

6A.8 PJMSettlement Costs. All costs of services provided by PJMSettlement for the benefit of Market Participants and Transmission Customers shall be included in the Administrative Services set forth in Schedule 9.

6A.9 Amendment of Previously Effective Arrangements.

(a) Transmission Service Agreements. Transmission Service Agreements in effect at the time this Section 6A becomes effective shall be deemed to be revised to include PJMSettlement as a Counterparty to the Transmission Service Agreement in the same manner and to the same extent as agreements entered after the effective date of this Section 6A.

(b) Reliability Pricing Model. PJMSettlement shall be the Counterparty to the transactions arising from the cleared Based Residual Auctions and Incremental Auctions that occurred prior to the effective date of this Section 6A and for which delivery will occur after the effective date of this Section 6A in the same manner and to the same extent as transactions arising from auctions cleared after the effective date of this Section 6A.

(c) Auction Revenue Rights and Financial Transmission Rights. PJMSettlement shall be the Counterparty with respect to the rights and obligations arising from Auction Revenue Rights and Financial Transmission Rights acquired in an auction or assigned by PJM prior to the effective date of this Section 6A to the same extent as with respect to rights and obligations arising from auctions or assignments of Auction Revenue Rights and Financial Transmission Rights after the effective date of this Section 6A.

PJM Tariff

Section 6A

(Non-Redline Version)

6A Counterparty

- 6A.1** PJM administers the Tariff and the Operating Agreement. Under the Tariff and Operating Agreement, PJM administers the provision of transmission service and associated ancillary services to customers and operates and administers various centralized electric power and energy markets. In obtaining transmission service and in these centralized markets, customers conduct transactions with PJMSettlement as a counterparty. Market participants also may conduct bilateral transactions with other market participants and they may self-supply power and energy to the electric loads they serve. Such bilateral and self-supply arrangements are not transactions with PJMSettlement.
- 6A.2** For purposes of contracting with customers and conducting financial settlements regarding the use of the transmission capacity of the Transmission System, PJM has established PJMSettlement. PJM also has established PJMSettlement as the entity that is the Counterparty with respect to the agreements and transactions in the centralized markets that the Transmission Provider administers under the Tariff and the Operating Agreement (i.e., the agreements and transactions that are not bilateral arrangements between market participants or self-supply). PJMSettlement will serve as the Counterparty to Financial Transmission Rights and Auction Revenue Rights instruments held by a Market Participant. Any subsequent bilateral transfer of these instruments by the Market Participant to another Market Participant shall require the consent of PJM, but shall not implicate PJMSettlement as a contracting party with respect to such subsequent bilateral transfer.
- 6A.3** As a party to the Consolidated Transmission Owners Agreement, PJM has acquired the right to use the transmission capacity of the Transmission System that is required to provide service under this Tariff and the authorization to resell transmission service using such capacity on the Transmission System. Under the Consolidated Transmission Owners Agreement, PJM compensates the Transmission Owners for the use of their transmission capacity by distributing certain revenues to the Transmission Owners as set forth in the Tariff and the Consolidated Transmission Owners Agreement. PJM has assigned its right to use the transmission capacity of the Transmission System to PJMSettlement. Accordingly, PJMSettlement shall compensate the Transmission Owners for the use of the transmission capacity required to provide service under this Tariff.
- 6A.4** Unless otherwise expressly stated in the Tariff or the Operating Agreement, PJMSettlement shall be the Counterparty to the customers purchasing Transmission Service and Network Integration Transmission

Service, and to the other transactions with customers and other entities under the Tariff.

6A.5 PJMSettlement shall not be a contracting party to other non-transmission transactions that are (i) bilateral transactions between market participants reported to the Transmission Provider, and (ii) self-supplied or self-scheduled transactions reported to the Transmission Provider.

6A.6 Notwithstanding the foregoing, PJMSettlement shall not be the Counterparty with respect to agreements and transactions regarding the Transmission Provider's administration of Parts IV and VI, Schedules 1, 9, 10-NERC, 10-RFC, 14, and 16 of the PJM Tariff.

6A.7 Confidentiality. PJMSettlement shall be bound by the same confidentiality requirements as the Transmission Provider.

6A.8 PJMSettlement Costs. All costs of services provided by PJMSettlement for the benefit of Market Participants and Transmission Customers shall be included in the Administrative Services set forth in Schedule 9.

6A.9 Amendment of Previously Effective Arrangements.

- (a) Transmission Service Agreements. Transmission Service Agreements in effect at the time this Section 6A becomes effective shall be deemed to be revised to include PJMSettlement as a Counterparty to the Transmission Service Agreement in the same manner and to the same extent as agreements entered after the effective date of this Section 6A.
- (b) Reliability Pricing Model. PJMSettlement shall be the Counterparty to the transactions arising from the cleared Based Residual Auctions and Incremental Auctions that occurred prior to the effective date of this Section 6A and for which delivery will occur after the effective date of this Section 6A in the same manner and to the same extent as transactions arising from auctions cleared after the effective date of this Section 6A.
- (c) Auction Revenue Rights and Financial Transmission Rights. PJMSettlement shall be the Counterparty with respect to the rights and obligations arising from Auction Revenue Rights and Financial Transmission Rights acquired in an auction or assigned by PJM prior to the effective date of this Section 6A to the same extent as with respect to rights and obligations arising from auctions or assignments of Auction Revenue Rights and Financial Transmission Rights after the effective date of this Section 6A.

**Revisions to Existing Sections of the
PJM Tariff
(Redline Version)**

OATT OPEN ACCESS TRANSMISSION TARIFF - OATT VI. ADMINISTRATION AND STUDY OF NEW SERVICE R - OATT SCHEDULE 9

**SCHEDULE 9
PJM Interconnection, L.L.C. Administrative Services**

a) PJM Interconnection, L.L.C. is the Transmission Provider under this Tariff. It also operates the PJM Interchange Energy Market as described in the Appendix to Attachment K of this Tariff and provides various other services to market participants. The cost of operating the PJM Interconnection, L.L.C., including principal and/or depreciation expense, interest expense and financing costs, shall be recovered from users of the various PJM services pursuant to the rates set forth in this Schedule 9 and its subsidiary Schedules which correspond to categories of services (“Service Categories”) provided by PJM. The charge in any month to any user of PJM’s services under this Schedule 9 is the sum of the charges under the following subsidiary Schedules of this Schedule 9 to the extent determined to be applicable by the Transmission Provider to such user in such month:

Schedule 9-1:	“Control Area Administration Service”
Schedule 9-2:	“Financial Transmission Rights Administration Service”
Schedule 9-3:	“Market Support Service”
Schedule 9-4:	“Regulation and Frequency Response Administration Service”
Schedule 9-5:	“Capacity Resource and Obligation Management Service”

b) The rates, terms, conditions, and applicability of these subsidiary services of this Schedule 9 are set forth on the subsidiary Schedules of this Schedule 9. These rates and charges in Schedule 9 and its subsidiary Schedules do not include the charges for PJMSettlement services to Transmission Customers and Market Participants. Transmission Provider will remit the portion of the charges for PJMSettlement services to PJMSettlement.

c) In addition to subsidiary schedules 9-1 through 9-5, this Schedule 9 also includes the following separate subsidiary schedules: (i) Schedule 9-6 Formula Rate for Costs of PJM Advanced Second Control Center, which is designed to recover certain costs associated with the advanced second control center; (ii) Schedule 9-FERC, which is designed to recover Transmission Provider’s costs for the annual charges assessed on Transmission Provider by FERC; and (iii) Schedule 9-OPSI, which is designed to recover Transmission Provider’s payments to the Organization of PJM States, Inc.; (iv) Schedule 9-MMU which is designed to recover the cost of providing market monitoring functions to the PJM Region; and (v) Schedule 9-FINCON, which is designed to recover Transmission Provider’s costs of outside consultants engaged by the Finance Committee.

d) For purposes of establishing the rates under this Schedule 9, PJM’s capital costs (including depreciation and/or principal, interest expense, and financing costs, but not including operation and maintenance expenses) of acquiring from certain transmission facility owners the capital projects and related assets, rights and licenses (“Facilities Costs”) that are the subject of an agreement that PJM has reached with such owners to purchase certain hardware, software, and similar assets that were funded by the owners and used by PJM (“Facilities Agreement”)

shall be included in PJM's rates pursuant to a rate moderation plan in accordance with the following requirements:

- (1) the Facilities Costs shall be phased in to PJM's rates and charges under this Schedule 9 over a period of five years;
- (2) the amount of Facilities Costs to be recovered by PJM in the first year of such phase-in shall be one-third of the annual amount of Facilities Costs projected (with such projection made prior to the first year, at the time when the first-year rates are determined under this Schedule 9) to be recovered in the third year of such phase-in (including any prior-year deferrals to be recovered in such third year);
- (3) the amount of Facilities Costs to be recovered by PJM in the second year of such phase-in shall be two-thirds of the annual amount of Facilities Costs projected (with such projection made prior to the second year, at the time when the second-year rates are determined under this Schedule 9) to be recovered in the third year of such phase-in (including any prior-year deferrals to be recovered in such third year).
- (4) the amount of Facilities Costs to be recovered by PJM in the third year of such phase-in shall be the annual amount of Facilities Costs in such year as determined by generally accepted accounting principles without regard to any rate moderation plan, plus the deferrals and financing costs described in (5) below.
- (5) the Facilities Costs that are not recovered in the first and second years of the phase-in will be deferred and recovered (with PJM's costs of financing such deferrals) beginning in the third year of the phase-in; provided, however, that no more than one-third of the total costs deferred from the first and second years (and PJM's costs of financing such deferrals) will be recovered in the third year.
- (6) all deferred costs (and all of PJM's costs of financing such deferrals) will be collected in full by the end of the fifth year.

OATT OPEN ACCESS TRANSMISSION TARIFF - OATT VI. ADMINISTRATION AND STUDY OF NEW SERVICE R - OATT ATTACHMENT K – APPENDIX - OATT 5. CALCULATION OF CHARGES AND CREDITS FOR TRA - OATT 5.4 Transmission Loss Charge Calculation.

5.4 Transmission Loss Charge Calculation.

5.4.1 Calculation by Office of the Interconnection.

The Office of the Interconnection shall calculate Transmission Loss Charges for each Network Service User, the PJM Interchange Energy Market, and each Transmission Customer.

5.4.2 General.

(a) The basis for the Transmission Loss Charges shall be the differences in the Locational Marginal Prices, defined as the Loss Price at a bus, between points of delivery and points of receipt, as determined in accordance with Section 2 of this Schedule. (b) The Office of the Interconnection shall calculate Loss Prices in the form of Day-ahead Loss Prices and Real-time Loss Prices for the PJM Region, in accordance with Section 2 of this Schedule.

5.4.3 Network Service User Calculation.

(a) Each Network Service User shall be charged for the increased cost of transmission losses to deliver the output of its firm Capacity Resources or other owned or contracted for resources, its firm bilateral purchases, and its non-firm bilateral purchases. The Transmission Loss Charge for deliveries from each such source shall be the Network Service User's hourly losses net bill.

(b) Market Buyers shall be charged for transmission losses resulting from all load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served from the PJM Interchange Energy Market in the Day-ahead Energy Market at the Day-ahead Loss Price applicable to each relevant load bus.

(c) Generating Market Buyers shall be reimbursed for transmission losses resulting from all energy scheduled to be delivered to the PJM Interchange Energy Market in the Day-ahead Energy Market at the Day-ahead Loss Price applicable to each relevant generation bus.

(d) Market Sellers shall be reimbursed for transmission losses resulting from all energy scheduled to be delivered in the Day-ahead Energy Market at the Day-ahead Loss Prices applicable to each relevant generation bus.

(e) The hourly net amount of energy delivered at each generation bus is determined by revenue meter data, if available, or by the State Estimator, if revenue meter data is not available. The total load actually served at each load bus is initially determined by the State Estimator. For each Electric Distributor that reports hourly net energy flows from metered tie lines and for which all generators within the Electric Distributor's territory report revenue quality, hourly net energy delivered, the total revenue meter load within the Electric Distributor's territory is calculated as the sum of all net import energy flows reported by their tie revenue

meters and all net generation reported via generator revenue meters. The amount of load at each of such Electric Distributor's load buses calculated by the State Estimator is then adjusted, in proportion to its share of the total load of that Electric Distributor, in order that the total amount of load across all of the Electric Distributor's load buses matches its total revenue meter calculated load.

(f) At the end of each hour during an Operating Day, the Office of the Interconnection shall calculate the Transmission Loss Charges at each Market Buyer's load bus to be charged for losses at Real-time Loss Prices determined by the product of the hourly Real-time Loss Prices at the relevant bus times the Market Buyer's megawatts of load (net of operating Behind The Meter Generation, but not to be less than zero) at the bus in that hour in excess of the load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served at that bus in the hour in the Day-ahead Energy Market. To the extent that the load (net of operating Behind The Meter Generation, but not to be less than zero) actually served at a load bus is less than the load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served at that bus in the Day-ahead Energy Market, the Market Buyer shall be paid for the difference at the Real-time Loss Price for the load bus at the time of the shortfall. The megawatts of load at each load bus shall be the sum of the megawatts of load (net of operating Behind The Meter Generation, but not less than zero) for that bus of that Market Buyer plus any megawatts of that Market Buyer's bilateral sales attributable to that bus. The total load charge for each Market Buyer shall be the sum, for each of a Market Buyer's load buses, of the charges at Day-ahead Loss Price determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1a plus the charges at Real-time Loss Prices determined as specified herein, net of any payments specified herein for each of the Market Buyer's load buses.

(g) At the end of each hour during an Operating Day, the Office of the Interconnection shall calculate the transmission loss payments at each Generating Market Buyer's generation bus to be paid at Real-time Loss Prices, determined by the product of the hourly Real-time Loss Price at the relevant bus times the Generating Market Buyer's megawatts of generation at such generation bus in the hour in excess of the energy scheduled to be injected at that bus in that hour in the Day-ahead Energy Market. To the extent that the energy actually injected at the generation bus is less than the energy scheduled to be injected at that bus in the Day-ahead Energy Market, the Generating Market Buyer shall be debited for the difference at the Real-time Loss Price for the generation bus at the time of the shortfall. The megawatts of generation at each generation bus shall be the sum of the megawatts of generation for that bus of that Generating Market Buyer plus any megawatts of bilateral purchases of that Generating Market Buyer attributable to that bus. The total generation revenue for each Generating Market Buyer shall be the sum, for each of the Generating Market Buyer's generation buses, of the revenues at Day-ahead Loss Price determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1A plus the revenues at Real-time Loss Prices determined as specified herein, net of any debits specified herein for each of the Market Buyer's generation buses.

(h) A Market Seller shall be paid for transmission losses that results from the Real-time sales of Spot Market Energy to the extent of its hourly net deliveries to the PJM Region of

energy in excess of amounts scheduled in the Day-ahead Energy Market from the Market Seller's resources. For pool External Resources, the Office of the Interconnection shall model, based on an appropriate flow analysis, the hourly amounts delivered from each such resource to the corresponding Interface Pricing Point between adjacent Control Areas and the PJM Region. The total real-time generation revenues for each Market Seller shall be the sum of its credits determined by the product of (i) the hourly net amount of energy delivered to the PJM Region at the applicable generation or interface bus in excess of the amount scheduled to be delivered in that hour at that bus in the Day-ahead Energy Market from each of the Market Seller's resources, times (ii) the hourly Real-time Loss Price at that bus. To the extent that the energy actually injected at a generation bus or Interface Pricing Point in any hour is less than the energy scheduled to be injected at that bus or point in the Day-ahead Energy Market, the Market Seller shall be debited for the difference at the Real-time Loss Price for the applicable bus or point at the time of the shortfall times the amount of the shortfall. The total generation revenue for each Market Seller shall be the sum, for each of the Market Seller's generation buses or Interface Pricing Points, of the revenues at Day-ahead Loss Prices determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1A plus the revenues at Real-time Loss Prices determined as specified herein, net of any debits specified herein for each of the Market Seller's generation buses or Interface Pricing Points.

5.4.4 Transmission Customer Calculation.

Each Transmission Customer using Firm Point-to-Point Transmission Service (as defined in the PJM Tariff), and each Transmission Customer using Non-Firm Point-to-Point Transmission Service (as defined in the PJM Tariff), shall be charged for the increased cost of transmission losses for the delivery of energy using Point-to-Point Transmission Service. Except as specified in this subsection, a Transmission Loss Charge shall be assessed for transmission use scheduled in the Day-ahead Energy Market, calculated as the amount to be delivered multiplied by the difference between the Day-ahead Loss Price at the delivery point or the delivery interface at the boundary of the PJM Region and the Day-ahead Loss Price at the source point or the source interface at the boundary of the PJM Region. Transmission Loss Charges shall be assessed for real-time transmission use in excess of the amounts scheduled for each hour in the Day-ahead Energy Market, calculated as the excess amount multiplied by the difference between the Real-time Loss Price at the delivery point or the delivery interface at the boundary of the PJM Region, and the Real-time Loss Price at the source point or the source interface at the boundary of the PJM Region. A Transmission Customer shall be paid for Transmission Loss Charges for real-time transmission use falling below the amounts scheduled for each hour in the Day-ahead Energy Market, calculated as the shortfall amount multiplied by the difference between the Real-time Loss Price at the delivery point or the delivery interface at the boundary of the PJM Region, and the Real-time Loss Price at the source point or the source interface at the boundary of the PJM Region. Real-time deviations from the Point-to-Point Transmission Service scheduled in the Day-ahead Energy Market shall be determined by the lesser of the real-time injection or withdrawal associated with such transmission service.

5.4.5 Total Transmission Loss Charges.

Intra-PJM Tariffs

The total Transmission Loss Charges collected by the PJMSettlement ~~Office of the Interconnection~~ each hour will be the aggregate net amounts determined as specified in this Schedule.

OATT OPEN ACCESS TRANSMISSION TARIFF - OATT VI. ADMINISTRATION AND STUDY OF NEW SERVICE R - OATT ATTACHMENT K – APPENDIX - OATT 7. FINANCIAL TRANSMISSION RIGHTS AUCTIONS - OATT 7.2 Financial Transmission Rights Characteristics

7.2 Financial Transmission Rights Characteristics.

7.2.1 Reconfiguration of Financial Transmission Rights.

Through an appropriate linear programming model, the Office of the Interconnection shall reconfigure the Financial Transmission Rights offered or otherwise available for sale in any auction to maximize the value to the bidders of the Financial Transmission Rights sold, provided that any Financial Transmission Rights acquired at auction shall be simultaneously feasible in combination with those Financial Transmission Rights outstanding at the time of the auction and not sold in the auction. The linear programming model shall, while respecting transmission constraints and the maximum MW quantities of the bids and offers, select the set of simultaneously feasible Financial Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers.

7.2.2 Specified Receipt and Delivery Points.

The Office of the Interconnection will post the list of available receipt and delivery points for each Financial Transmission Rights Auction before the start of the bidding window. Auction bids for annual Financial Transmission Rights Obligations may specify as receipt and delivery points any combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points. Auction bids for annual Financial Transmission Rights Options may specify as receipt and delivery points such combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points as the Office of the Interconnection shall allow from time to time as set forth in PJM Manual 06: Financial Transmission Rights. Auction bids for Financial Transmission Rights submitted in the monthly auctions may specify as receipt and delivery points any combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points for bids that cover any month beyond the next month, including bids that cover Planning Period Quarters or the Planning Period Balance. Auction bids for Financial Transmission Rights submitted in the monthly auctions that cover the single calendar month period immediately following the month in which the monthly auction is conducted may specify any combination of available receipt and delivery buses represented in the State Estimator model for which the Office of the Interconnection calculates and posts Locational Marginal Prices. Auction bids may specify available receipt and delivery points from locations outside of the PJM Region to locations inside such region, from locations within the PJM Region to locations outside such region, or to and from locations within the PJM Region.

7.2.3 Transmission Congestion Charges.

Financial Transmission Rights shall entitle holders thereof to credits only for Transmission Congestion Charges, and shall not confer a right to credits for payments arising from or relating to transmission congestion made to any entity other than the PJM Settlement Office of the Interconnection.

OATT OPEN ACCESS TRANSMISSION TARIFF - OATT VI. ADMINISTRATION AND STUDY OF NEW SERVICE R - OATT ATTACHMENT Q

ATTACHMENT Q

PJM CREDIT POLICY

POLICY STATEMENT:

It is the policy of PJM Interconnection, LLC (“PJM”) that prior to an entity participating in the PJM Markets, or in order to take Transmission Service, the entity must demonstrate its ability to meet PJMSettlement’s credit requirements.

Prior to becoming a Market Participant, Transmission Customer, and/or Member of PJM, PJMSettlement must accept and approve a Credit Application (including Credit Agreement) from such entity and establish a Working Credit Limit with PJMSettlement. PJMSettlement shall approve or deny an accepted Credit Application on the basis of a complete credit evaluation including, but not be limited to, a review of financial statements, rating agency reports, and other pertinent indicators of credit strength.

POLICY INTENT:

This credit policy describes requirements for: (1) the establishment and maintenance of credit by Market Participants, Transmission Customers, and entities seeking either such status (collectively “Participants”), pursuant to one or more of the Agreements, and (2) forms of security that will be deemed acceptable (hereinafter the “Financial Security”) in the event that the Participant does not satisfy the financial or other requirements to establish Unsecured Credit.

This policy also sets forth the credit limitations that will be imposed on Participants in order to minimize the possibility of failure of payment for services rendered pursuant to the Agreements, and conditions that will be considered an event of default pursuant to this policy and the Agreements.

These credit rules may establish certain set-asides of credit for designated purposes (such as for FTR or RPM activity). Such set-asides shall be construed to be applicable to calculation of credit requirements only, and shall not restrict PJMSettlement’s ability to apply such designated credit to any obligation(s) in case of a default.

PJMSettlement may post on ~~PJM’s~~ web site, and may reference on OASIS, a supplementary document which contains additional business practices (such as algorithms for credit scoring) that are not included in this document. Changes to the supplementary document will be subject to stakeholder review and comment prior to implementation. PJMSettlement will notify any individual Participant that will have its Unsecured Credit Allowance reduced by 25% or more, or its Financial Security requirement increased by 25% or more by such change. PJMSettlement may specify a required compliance date, not less than 15 days from notification, by which time all Participants must comply with provisions that have been revised in the supplementary document.

APPLICABILITY:

This policy applies to all Participants.

IMPLEMENTATION:

I. CREDIT EVALUATION

Each Participant will be subject to a complete credit evaluation in order for PJM~~Settlement~~ to determine creditworthiness and to establish an **Unsecured Credit Allowance**, if applicable; provided, however, that a Participant need not provide the information specified in section I.A or I.B if it notifies PJM~~Settlement~~ in writing that it does not seek any Unsecured Credit Allowance. PJM~~Settlement~~ will identify any necessary Financial Security requirements and establish a Working Credit Limit for each Participant. In addition, PJM~~Settlement~~ will perform follow-up credit evaluations on at least an annual basis.

If a **Corporate Guaranty** is being utilized to establish credit for a Participant, the guarantor will be evaluated and the Unsecured Credit Allowance or Financial Security requirement will be based on the financial strength of the Guarantor.

PJM~~Settlement~~ will provide a Participant, upon request, with a written explanation for any change in credit levels or collateral requirements. PJM~~Settlement~~ will provide such explanation within ten Business Days.

If a Participant believes that either its level of unsecured credit or its collateral requirement has been incorrectly determined, according to this credit policy, then the Participant may send a request for reconsideration in writing to ~~PJMSettlement~~~~PJM's Treasury Department~~. Such a request should include:

- A citation to the applicable section(s) of the PJM~~Settlement~~ credit policy along with an explanation of how the respective provisions of the credit policy were not carried out in the determination as made
- A calculation of what the Participant believes should be the correct credit level or collateral requirement, according to terms of the credit policy

~~PJMSettlement~~~~PJM's Treasury Department~~ will reconsider the determination and will provide a written response as promptly as practical, but no longer than ten Business Days of receipt of the request. If the Participant still feels that the determination is incorrect, then the Participant may contest that determination. Such contest should be in written form, addressed to ~~PJMSettlement~~~~PJM's Chief Financial Officer~~, and should contain:

- A complete copy of the Participant's earlier request for reconsideration, including citations and calculations

- A copy of ~~the PJMSettlement's PJM Treasury Department's~~ written response to its request for reconsideration
- An explanation of why it believes that the determination still does not comply with the credit policy

~~PJMSettlement PJM's Chief Financial Officer~~ will investigate and will respond to the Participant with a final determination on the matter as promptly as practical, but no longer than 20 Business Days.

Neither requesting reconsideration nor contesting the determination following such request shall relieve or delay Participant's responsibility to comply with all provisions of this credit policy.

A. Initial Credit Evaluation

In completing the initial credit evaluation, PJMSettlement will consider:

1) Rating Agency Reports

In evaluating credit strength, PJMSettlement will review rating agency reports from Standard & Poor's, Moody's Investors Service, Fitch Ratings, or other nationally known rating agencies. The focus of the review will be on senior unsecured debt ratings; however, PJMSettlement will consider other ratings if senior unsecured debt ratings are not available.

2) Financial Statements and Related Information

Each Participant must submit with its application audited financial statements for the most recent fiscal quarter, as well as the most recent three fiscal years, or the period of existence of the Participant, if shorter. All financial and related information considered for a Credit Score must be audited by an outside entity, and must be accompanied by an unqualified audit letter acceptable to PJMSettlement.

The information should include, but not be limited to, the following:

- a. If publicly traded:
 - i. Annual and quarterly reports on Form 10-K and Form 10-Q, respectively.
 - ii. Form 8-K reports disclosing Material changes, if any.
- b. If privately held:
 - i. Management's Discussion & Analysis
 - ii. Report of Independent Accountants
 - iii. Financial Statements, including:
 - Balance Sheet
 - Income Statement
 - Statement of Cash Flows
 - Statement of Stockholder's Equity

iv. Notes to Financial Statements

If the above information is available on the Internet, the Participant may provide a letter stating where such statements may be located and retrieved by PJMSettlement. For certain Participants, some of the above financial submittals may not be applicable, and alternate requirements may be specified by PJMSettlement.

In the credit evaluation of Cooperatives and Municipalities, PJMSettlement may request additional information as part of the overall financial review process and will consider other alternative measures in determining financial strength and creditworthiness. For Cooperatives and Municipalities, PJMSettlement will consider qualitative factors such as the following in its credit evaluation: taxing authority, independent ratemaking authority, financial strength of members that have contractual commitments to pay a cooperative's expenses, and other measures of size besides Tangible Net Worth.

3) References

PJMSettlement may request Participants to provide with their applications at least one (1) bank and three (3) utility credit references. In the case where a Participant does not have the required utility references, trade payable vendor references may be substituted.

4) Litigation, Commitments and Contingencies

Each Participant is also required to provide with its application information as to any known Material litigation, commitments or contingencies as well as any prior bankruptcy declarations or Material defalcations by the Participant or its predecessors, subsidiaries or Affiliates, if any. These disclosures shall be made upon application, upon initiation or change, and at least annually thereafter, or as requested by PJMSettlement.

5) Other Disclosures

Each Participant is required to disclose any Affiliates that are currently Members of PJMSettlement or are applying for membership within PJMSettlement. Each Participant is also required to disclose the existence of any ongoing investigations by the Securities and Exchange Commission ("SEC"), Federal Energy Regulatory Commission ("FERC"), or any other governing, regulatory, or standards body. These disclosures shall be made upon application, upon initiation or change, and at least annually thereafter, or as requested by PJMSettlement.

B. Ongoing Credit Evaluation

On at least an annual basis, PJMSettlement will perform follow-up credit evaluations on all Participants. In completing the credit evaluation, PJMSettlement will consider:

1) Rating Agency Reports

In evaluating credit strength, PJM [Settlement](#) will review rating agency reports from Standard & Poor's, Moody's Investors Service, Fitch Ratings, or other nationally known rating agencies. The focus of the review will be on senior unsecured debt ratings; however, PJM [Settlement](#) will consider other ratings if senior unsecured debt ratings are not available.

2) Financial Statements and Related Information

Each Participant must submit audited annual financial statements as soon as they become available and no later than 120 days after fiscal year end. Each Participant is also required to provide PJM [Settlement](#) with quarterly financial statements promptly upon their issuance, but no later than 60 days after the end of each quarter. All financial and related information considered for a Credit Score must be audited by an outside entity, and must be accompanied by an unqualified audit letter acceptable to PJM [Settlement](#). If financial statements are not provided within the timeframe required, the Participant may not be granted an Unsecured Credit Allowance.

The information should include, but not be limited to, the following:

- a. If publicly traded:
 - i. Annual and quarterly reports on Form 10-K and Form 10-Q, respectively.
 - ii. Form 8-K reports disclosing Material changes, if any, immediately upon issuance.
- b. If privately held:
 - i. Management's Discussion & Analysis
 - ii. Report of Independent Accountants
 - iii. Financial Statements, including:
 - Balance Sheet
 - Income Statement
 - Statement of Cash Flows
 - Statement of Stockholder's Equity
 - iv. Notes to Financial Statements

If the above information is available on the Internet, the Participant may provide a letter stating where such statements may be located and retrieved by PJM [Settlement](#). For certain Participants, some of the above financial submittals may not be applicable, and alternate requirements may be specified by PJM [Settlement](#).

In the credit evaluation of Cooperatives and Municipalities, PJM [Settlement](#) may request additional information as part of the overall financial review process and will consider other alternative measures in determining financial strength and creditworthiness. For Cooperatives and Municipalities, PJM [Settlement](#) will consider qualitative factors such as the following in its credit evaluation: taxing authority, independent ratemaking authority, financial strength of members that have contractual commitments to pay a cooperative's expenses, and other measures of size besides Tangible Net Worth.

3) Material Changes

| Each Participant is responsible for informing PJMSettlement immediately, in writing, of any Material change in its financial condition.

For the purpose of this policy, a Material change in financial condition may include, but not be limited to, any of the following:

- a. A downgrade of any debt rating by any rating agency;
- b. Being placed on a credit watch with negative implications by any rating agency;
- c. A bankruptcy filing;
- d. Insolvency;
- e. A report of a quarterly or annual loss or a decline in earnings of ten percent or more compared to the prior period;
- f. Restatement of prior financial statements;
- g. The resignation of key officer(s); or
- h. The filing of a lawsuit that could adversely impact any current or future financial results by ten percent or more.

| If there is a Material change in the financial condition of the Participant, PJMSettlement may require the Participant to provide Financial Security within two Business Days, in an amount and form approved by PJMSettlement. If the Participant fails to provide the required Financial Security, the Participant shall be in default under this credit policy.

4) Litigation, Commitments, and Contingencies

| Each Participant is also required to provide information as to any known Material litigation, commitments or contingencies as well as any prior bankruptcy declarations or Material defalcations by the Participant or its predecessors, subsidiaries or Affiliates, if any. These disclosures shall be made upon initiation or change or as requested by PJMSettlement.

5) Other Disclosures

| Each Participant is required to disclose any Affiliates that are currently Members of PJM or are applying for membership within PJM. Each Participant is also required to disclose the existence of any ongoing investigations by the Securities and Exchange Commission (“SEC”), Federal Energy Regulatory Commission (“FERC”), or any other governing, regulatory, or standards body. These disclosures shall be made upon initiation or change, or as requested by PJMSettlement.

C. Corporate Guaranty

If a Corporate Guaranty is being utilized to establish credit for a Participant, the Guarantor will be evaluated and the Unsecured Credit Allowance or Financial Security requirement will be based on the financial strength of the Guarantor.

An irrevocable and unconditional Corporate Guaranty obtained from a third party (“Guarantor”) may be utilized as part of the credit evaluation process, but will not be considered a form of Financial Security. The Corporate Guaranty will be considered a transfer of credit from the Guarantor to the Participant. The Corporate Guaranty must guarantee the (i) full and prompt payment of all amounts payable by the Participant under the Agreements, and (ii) performance by the Participant under this policy.

The Corporate Guaranty should clearly state the identities of the “Guarantor,” “Beneficiary” (PJMSettlement) and “Obligor” (Participant). The Corporate Guaranty must be signed by an officer of the Guarantor, and must demonstrate that it is duly authorized in a manner acceptable to PJMSettlement. Such demonstration may include either a Corporate Seal on the Guaranty itself, or an accompanying executed and sealed Secretary’s Certificate noting that the Guarantor was duly authorized to provide such Corporate Guaranty and that the person signing the Corporate Guaranty is duly authorized, or other manner acceptable to PJMSettlement.

A Participant supplying a Corporate Guaranty must provide the same information regarding the Guarantor as is required in the “Initial Credit Evaluation” §I.A. and the “Ongoing Evaluation” §I.B. of this policy, including providing the Rating Agency Reports, Financial Statements and Related Information, References, Litigation Commitments and Contingencies, and Other Disclosures. A Participant supplying a Foreign or Canadian Guaranty must also satisfy the requirements of §I.C.1 or §I.C.2, as appropriate.

If there is a Material change in the financial condition of the Guarantor or if the Corporate Guaranty comes within 30 days of expiring without renewal, the Participant will be required to provide Financial Security either in the form of a cash deposit or a letter of credit. Failure to provide the required Financial Security within two Business Days after request by PJMSettlement will constitute an event of default under this credit policy. A Participant may request PJMSettlement to perform a credit evaluation in order to determine creditworthiness and to establish an Unsecured Credit Allowance, if applicable. If PJMSettlement determines that a Participant does qualify for a sufficient Unsecured Credit Allowance, then Financial Security will not be required.

The PJMSettlement Credit Application contains an acceptable form of Corporate Guaranty that should be utilized by a Participant choosing to establish its credit with a Corporate Guaranty. If the Corporate Guaranty varies in any way from the PJMSettlement format, it must first be reviewed and approved by PJMSettlement. All costs associated with obtaining and maintaining a Corporate Guaranty and meeting the policy provisions are the responsibility of the Participant.

1) Foreign Guaranties

A Foreign Guaranty is a Corporate Guaranty that is provided by an Affiliate entity that is domiciled in a country other than the United States or Canada. The entity providing a Foreign Guaranty on behalf of a Participant is a Foreign Guarantor. A Participant may provide a Foreign Guaranty in satisfaction of part of its credit obligations or voluntary credit provision at PJMSettlement provided that all of the following conditions are met:

PJMSettlement reserves the right to deny, reject, or terminate acceptance of any Foreign Guaranty at any time, including for material adverse circumstances or occurrences.

a. A Foreign Guaranty:

- i. Must contain provisions equivalent to those contained in PJMSettlement's standard form of Foreign Guaranty with any modifications subject to review and approval by PJMSettlement counsel.
- ii. Must be denominated in US currency.
- iii. Must be written and executed solely in English, including any duplicate originals.
- iv. Will not be accepted towards a Participant's Unsecured Credit Allowance for more than the following limits, depending on the Foreign Guarantor's credit rating:

Rating of Foreign Guarantor	Maximum Accepted Guaranty if Country Rating is AAA	Maximum Accepted Guaranty if Country Rating is AA+
A- and above	USD50,000,000	USD30,000,000
BBB+	USD30,000,000	USD20,000,000
BBB	USD10,000,000	USD10,000,000
BBB- or below	USD 0	USD 0

- v. May not exceed 50% of the Participant's total credit, if the Foreign Grantor is rated less than BBB+.

b. A Foreign Guarantor:

- i. Must satisfy all provisions of the PJM credit policy applicable to domestic Guarantors.
- ii. Must be an Affiliate of the Participant.
- iii. Must maintain an agent for acceptance of service of process in the United States; such agent shall be situated in the Commonwealth of Pennsylvania, absent legal constraint.
- iv. Must be rated by at least one Rating Agency acceptable to PJMSettlement; the credit strength of a Foreign Guarantor may not be determined based on an evaluation of its financials without an actual credit rating as well.
- v. Must have a Senior Unsecured (or equivalent, in PJMSettlement's sole discretion) rating of BBB (one notch above BBB-) or greater by any and all agencies that provide rating coverage of the entity.
- vi. Must provide financials in GAAP format or other format acceptable to PJMSettlement with clear representation of net worth, intangible assets, and any other information PJMSettlement may require in order to determine the entity's Unsecured Credit Allowance
- vii. Must provide a Secretary's Certificate certifying the adoption of Corporate Resolutions:

1. Authorizing and approving the Guaranty; and
 2. Authorizing the Officers to execute and deliver the Guaranty on behalf of the Guarantor.
- viii. Must be domiciled in a country with a minimum long-term sovereign (or equivalent) rating of AA+/Aa1, with the following conditions:
1. Sovereign ratings must be available from at least two rating agencies acceptable to PJM Settlement (e.g. S&P, Moody's, Fitch, DBRS).
 2. Each agency's sovereign rating for the domicile will be considered to be the lowest of: country ceiling, senior unsecured government debt, long-term foreign currency sovereign rating, long-term local currency sovereign rating, or other equivalent measures, at PJM Settlement's sole discretion.
 3. Whether ratings are available from two or three agencies, the lowest of the two or three will be used.
- ix. Must be domiciled in a country that recognizes and enforces judgments of US courts.
- x. Must demonstrate financial commitment to activity in the United States as evidenced by one of the following:
1. American Depositary Receipts (ADR) are traded on the New York Stock Exchange, American Stock Exchange, or NASDAQ.
 2. Equity ownership worth over USD100,000,000 in the wholly-owned or majority owned subsidiaries in the United States.
- xi. Must satisfy all other applicable provisions of the PJM Tariff and/or Operating Agreement, including this credit policy.
- xii. Must pay for all expenses incurred by PJM Settlement related to reviewing and accepting a foreign guaranty beyond nominal in-house credit and legal review.
- xiii. Must, at its own cost, provide PJM Settlement with independent legal opinion from an attorney/solicitor of PJM Settlement's choosing and licensed to practice law in the United States and/or Guarantor's domicile, in form and substance acceptable to PJM Settlement in its sole discretion, confirming the enforceability of the Foreign Guaranty, the Guarantor's legal authorization to grant the Guaranty, the conformance of the Guaranty, Guarantor, and Guarantor's domicile to all of these requirements, and such other matters as PJM Settlement may require in its sole discretion.

2) Canadian Guaranties

A Canadian Guaranty is a Corporate Guaranty that is provided by an Affiliate entity that is domiciled in Canada and satisfies all of the provisions below. The entity providing a Canadian Guaranty on behalf of a Participant is a Canadian Guarantor. A Participant may provide a Canadian Guaranty in satisfaction of part of its credit obligations or voluntary credit provision at PJM Settlement provided that all of the following conditions are met.

PJM Settlement reserves the right to deny, reject, or terminate acceptance of any Canadian Guaranty at any time for reasonable cause, including adverse material circumstances.

Intra-PJM Tariffs

- a. A Canadian Guaranty:
 - i. Must contain provisions equivalent to those contained in PJMSettlement's standard form of Foreign Guaranty with any modifications subject to review and approval by PJMSettlement counsel.
 - ii. Must be denominated in US currency.
 - iii. Must be written and executed solely in English, including any duplicate originals.
- b. A Canadian Guarantor:
 - i. Must satisfy all provisions of the PJM credit policy applicable to domestic Guarantors.
 - ii. Must be an Affiliate of the Participant.
 - iii. Must maintain an agent for acceptance of service of process in the United States; such agent shall be situated in the Commonwealth of Pennsylvania, absent legal constraint.
 - iv. Must be rated by at least one Rating Agency acceptable to PJMSettlement; the credit strength of a Canadian Guarantor may not be determined based on an evaluation of its financials without an actual credit rating as well.
 - v. Must provide financials in GAAP format or other format acceptable to PJMSettlement with clear representation of net worth, intangible assets, and any other information PJMSettlement may require in order to determine the entity's Unsecured Credit Allowance.
 - vi. Must satisfy all other applicable provisions of the PJM Tariff and/or Operating Agreement, including this credit policy.

II. CREDIT ALLOWANCE AND WORKING CREDIT LIMIT

PJMSettlement's credit evaluation process will include calculating a Credit Score for each Participant. The credit score will be utilized to determine a Participant's Unsecured Credit Allowance.

Participants who do not qualify for an Unsecured Credit Allowance will be required to provide Financial Security based on their Peak Market Activity, as provided below.

A corresponding Working Credit Limit will be established based on the Unsecured Credit Allowance and/or the Financial Security provided.

Where Participant of PJM are considered Affiliates, Unsecured Credit Allowances and Working Credit Limits will be established for each individual Participant, subject to an aggregate maximum amount for all Affiliates as provided for in §II.F of this policy.

In the credit evaluation of Cooperatives and Municipalities, PJMSettlement may request additional information as part of the overall financial review process and will consider other alternative measures in determining financial strength and creditworthiness. For Cooperatives and Municipalities, PJMSettlement will consider qualitative factors such as the following in its credit evaluation: taxing authority, independent ratemaking authority, financial strength of

members that have contractual commitments to pay a cooperative's expenses, and other measures of size besides Tangible Net Worth.

A. Credit Score

For participants with credit ratings, a Credit Score will be assigned based on their senior unsecured credit rating and credit watch status as shown in the table below. If an explicit senior unsecured rating is not available, PJM Settlement may impute an equivalent rating from other ratings that are available. For Participants without a credit rating, but who wish to be considered for unsecured Credit, a Credit Score will be generated from PJM Settlement's review and analysis of various factors that are predictors of financial strength and creditworthiness. Key factors in the scoring process include, financial ratios, and years in business. PJM Settlement will consistently apply the measures it uses in determining Credit Scores. The credit scoring methodology details are included in a supplementary document available on OASIS.

Rated Entities Credit Scores

Rating	Score	Score Modifier	
		Credit Watch Negative	Credit Watch Positive
AAA	100	-1.0	0.0
AA+	99	-1.0	0.0
AA	99	-1.0	0.0
AA-	98	-1.0	0.0
A+	97	-1.0	0.0
A	96	-2.0	0.0
A-	93	-3.0	1.0
BBB+	88	-4.0	2.0
BBB	78	-4.0	2.0
BBB-	65	-4.0	2.0
BB+ and below	0	0.0	0.0

B. Unsecured Credit Allowance

PJM [Settlement](#) will determine a Participant's Unsecured Credit Allowance based on its Credit Score and the parameters in the table below. The maximum Unsecured Credit Allowance is the lower of:

- 1) A percentage of the Participant's Tangible Net Worth, as stated in the table below, with the percentage based on the Participant's credit score; and
- 2) A dollar cap based on the credit score, as stated in the table below:

Credit Score	Tangible Net Worth Factor	Maximum Unsecured Credit Allowance (\$ Million)
91-100	2.125 – 2.50%	\$50
81-90	1.708 – 2.083%	\$42
71-80	1.292 – 1.667%	\$33
61-70	0.875 – 1.25%	\$7
51-60	0.458 – 0.833%	\$0-\$2
50 and Under	0%	\$0

If a Corporate Guaranty is utilized to establish an Unsecured Credit Allowance for a Participant, the value of a Corporate Guaranty will be the lesser of:

- The limit imposed in the Corporate Guaranty;
- The Unsecured Credit Allowance calculated for the Guarantor; and
- A portion of the Unsecured Credit Allowance calculated for the Guarantor in the case of Affiliated Participants.

PJM~~Settlement~~ has the right at any time to modify any Unsecured Credit Allowance and/or require additional Financial Security as may be deemed reasonably necessary to support current market activity. Failure to pay the required amount of additional Financial Security within two Business Days shall be an event of default.

PJM~~Settlement~~ will maintain a posting of each Participant's unsecured Credit Allowance, along with certain other credit related parameters, on the PJM web site in a secure, password-protected location. Such information will be updated at least weekly. Each Participant will be responsible for monitoring such information and recognizing small changes that may occur. However, in case of a reduction in Unsecured Credit Allowance of greater than 25% within a 30-day period, PJM~~Settlement~~ will notify the Participant. PJM~~Settlement~~'s responsibility to notify the Participant will be satisfied if it sends an email notification to either a primary or secondary Members Committee Representative for the Participant. It is the Participant's responsibility to ensure that such a representative exists, and that contact information is correct.

C. Seller Credit

Participants that have maintained a Net Sell Position ~~in PJM~~ for each of the prior 12 months are eligible for Seller Credit, which is an additional form of Unsecured Credit. A Participant's Seller Credit will be equal to sixty percent of the Participant's thirteenth smallest weekly Net Sell Position invoiced in the past 52 weeks.

Each Participant receiving Seller Credit must maintain both its Seller Credit and its Total Net Sell Position equal to or greater than the Participant's aggregate credit requirements ~~at PJM~~, less any Financial Security or other sources of credit provided.

For every participant receiving Seller Credit, PJM~~Settlement~~ will maintain a forecast of the Participant's Total Net Sell Position considering the Participant's current Total Net Sell Position, recent trends in the Participant's Total Net Sell Position, and other information available to PJM~~Settlement~~, such as, but not limited to, known generator outages, changes in load responsibility, and bilateral transactions impacting the Participant. If PJM~~Settlement~~'s forecast ever indicates that the Participant's Total Net Sell Position may in the future be less than the Participant's aggregate credit requirements ~~at PJM~~, less any Financial Security or other sources of credit provided, then PJM~~Settlement~~ may require Financial Security as needed to cover the difference. Failure to pay the required amount of additional Financial Security within two Business Days shall be an event of default.

Any Financial Security required by PJM~~Settlement~~ pursuant to these provisions for Seller Credit will be returned once the requirement for such Financial Security has ended. Seller Credit may not be conveyed to another entity through use of a guaranty.

D. Peak Market Activity and Financial Security Requirement

A PJM Participant or Applicant that has an insufficient Unsecured Credit Allowance to satisfy its Peak Market Activity will be required to provide Financial Security such that its Unsecured Credit Allowance and Financial Security together are equal to its Peak Market Activity in order to secure its transactional activity in the PJM Market.

Peak Market Activity for Participants will be determined semi-annually beginning in the first complete billing week in the months of April and October. Peak Market Activity shall be the greater of the initial Peak Market Activity, as explained below, or the greatest amount invoiced for the Participant's transaction activity for all PJM markets and services, excluding FTR Net Activity, in any rolling one, two, or three week period, ending within a respective semi-annual period.

The initial Peak Market Activity for Applicants will be determined by PJM based on a review of an estimate of their transactional activity for all PJM markets and services, excluding FTR Net Activity, over the next 52 weeks, which the Applicant shall provide to PJM.

The initial Peak Market Activity for Participants, calculated at the beginning of each respective semi-annual period, shall be the average of all non-zero invoice totals, excluding FTR Net Activity, over the previous 52 weeks. This calculation shall be performed and applied within three business days following the day the invoice is issued for the first full billing week in the current semi-annual period.

Prepayments shall not affect Peak Market Activity unless otherwise agreed to in writing pursuant to this Credit Policy.

All Peak Market Activity calculations shall take into account reductions of invoice values effectuated by early payments which are applied to reduce a Participant's Peak Market Activity as contemplated by other terms of the Credit Policy; provided that the initial Peak Market Activity shall not be less than the average value calculated using the weeks for which no early payment was made.

A Participant may reduce its Financial Security Requirement by agreeing in writing (in a form acceptable to PJM [Settlement](#)) to make additional payments, including prepayments, as and when necessary to ensure that such Participant's Total Net Obligation at no time exceeds such reduced Financial Security Requirement.

PJM [Settlement](#) may, at its discretion, adjust a Participant's Financial Security Requirement if PJM [Settlement](#) determines that the Peak Market Activity is not representative of such Participant's expected activity, as a consequence of known, measurable, and sustained changes. Such changes may include the loss (without replacement) of short-term load contracts, when such contracts had terms of three months or more and were acquired through state-sponsored retail load programs, but shall not include short-term buying and selling or virtual bidding.

PJMSettlement may waive the Financial Security Requirement for a Participant that agrees in writing that it shall not, after the date of such agreement, incur obligations under any of the Agreements. Such entity's access to all electronic transaction systems administered by PJM shall be terminated.

PJMSettlement will maintain a posting of each Participant's Financial Security Requirement on the PJM web site in a secure, password-protected location. Such information will be updated at least weekly. Each Participant will be responsible for monitoring such information and recognizing changes that may occur. However, in case of an increase in the Financial Security Requirement of greater than 25% within a 30-day period, PJMSettlement will notify the Participant. PJMSettlement's responsibility to notify the Participant will be satisfied if it sends an email notification to either a primary or secondary Members Committee Representative for the Participant. It is the Participant's responsibility to ensure that such a representative exists, and that contact information is correct. This notification does not restrict or in any way affect PJMSettlement's authority to require Financial Security under other provisions of the credit policy.

E. Working Credit Limit

PJMSettlement will establish a Working Credit Limit for each Participant against which its **Total Net Obligation** will be monitored. The Working Credit Limit is defined as 75% of the Financial Security provided to PJMSettlement and/or 75% of the Unsecured Credit Allowance determined by PJMSettlement based on a credit evaluation. A Participant's Total Net Obligation should not exceed its Working Credit Limit.

F. Credit Limit Setting For Affiliates

If two or more Participants are Affiliates and each is being granted an Unsecured Credit Allowance and a corresponding Working Credit Limit, PJMSettlement will consider the overall creditworthiness of the Affiliated Participants when determining the Unsecured Credit Allowances and Working Credit Limits in order not to grant more Unsecured Credit than the overall corporation could support.

Example: Participants A and B each have a \$10.0 million Corporate Guaranty from their common parent, a holding company with an Unsecured Credit Allowance calculation of \$12.0 million. PJMSettlement may limit the Unsecured Credit Allowance for each Participant to \$6.0 million, so the total Unsecured Credit Allowance does not exceed the corporate total of \$12.0 million.

PJMSettlement will work with Affiliated Participants to allocate the total Unsecured Credit Allowance among the Affiliates while assuring that no individual Participant, nor common guarantor, exceeds the Unsecured Credit Allowance appropriate for its credit strength. The aggregate Unsecured Credit Allowance for a group of Affiliates shall not exceed \$150 million. A group of Affiliates subject to this cap shall request PJMSettlement to allocate the maximum Unsecured Credit Allowance and Working Credit Limit amongst the group, assuring that no

individual Participant, nor common guarantor, shall exceed the Unsecured Credit Allowance appropriate for its credit strength.

G. Working Credit Limit Violations

1) Notification

A Participant is subject to notification when its Total Net Obligation to PJM Settlement approaches the Participant's established Working Credit Limit.

2) Suspension

A Participant that exceeds its Working Credit Limit is subject to suspension from participation in the PJM markets and from scheduling any future Transmission Service unless and until Participant's credit standing is brought within acceptable limits. A Participant will have two Business Days from notification to remedy the situation in a manner deemed acceptable by PJM Settlement. Additionally, PJM Settlement, in coordination with PJM, will take such actions as may be required or permitted under the Agreements, including but not limited to the termination of the Participant's ongoing Transmission Service and participation in PJM Markets. Failure to comply with this policy will be considered an event of default under this credit policy.

H. PJM Administrative Charges

Financial Security held by PJM Settlement shall also secure obligations to PJM for PJM administrative charges.

I. Pre-existing Financial Security

PJM Settlement's credit requirements are applicable as of the effective date of the filing on May 5, 2010 by PJM and PJM Settlement of amendments to Attachment Q. Financial Security held by PJM prior to the effective date of such amendments shall be held by PJM for the benefit of PJM Settlement.

III. VIRTUAL BID SCREENING

A. Credit and Financial Security

PJM Settlement does not require a Participant to establish separate or additional credit for virtual bidding. A Participant's ability to submit virtual bids into the spot market will be governed, however, by the terms of this section, so a Participant may choose to establish such additional credit in order to expand its ability to undertake virtual bidding in the PJM spot market.

If a Participant chooses to provide additional Financial Security in order to increase its **Credit Available for Virtual Bidding** PJM Settlement may establish a reasonable timeframe, not to exceed three months, for which such Financial Security must be maintained. PJM Settlement will not impose such restriction on a deposit unless a Participant is notified prior to making the

deposit. Such restriction, if applied, shall be applied to all future deposits by all virtual bidding participants.

A Participant wishing to increase its Credit Available for Virtual Bidding by providing additional Financial Security may make the appropriate arrangements with ~~the PJMSettlement-Treasury Department~~. PJMSettlement will make a good faith effort to make new Financial Security available as Credit Available for Virtual Bidding as soon as practicable after confirmation of receipt. In any event, however, Financial Security received and confirmed by noon on a business day will be applied (as provided under this policy) to Credit Available for Virtual Bidding no later than 10:00 am on the following business day. Receipt and acceptance of wired funds for cash deposit shall mean actual receipt by PJMSettlement's bank, deposit into PJMSettlement's customer deposit account, and confirmation by PJMSettlement Treasury that such wire has been received and deposited. Receipt and acceptance of letters of credit shall mean receipt of the original letter of credit or amendment thereto, and confirmation from PJMSettlement's credit and legal staffs that such letter of credit or amendment thereto conforms to PJMSettlement's requirements, which confirmation shall be made in a reasonable and practicable timeframe. To facilitate this process, bidders wiring funds for the purpose of increasing their Credit Available for Virtual Bidding are advised to specifically notify PJMSettlement Treasury that a wire is being sent for such purpose.

B. Market Activity Review

Each month, PJMSettlement will update the **Nodal Reference Price** for each node and each aggregated price point based on a rank ordering of historical price differentials. The Nodal Reference Price at each location will be the 97th percentile price differential between hourly Day-ahead and Real-time prices experienced over the corresponding two-month reference period in the prior calendar year. In order to capture seasonality effects and maintain a two-month reference period, reference months will be grouped by two, starting with January (e.g., Jan-Feb, Mar-Apr, ... , Jul-Aug, ... 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.

On a daily basis, PJMSettlement will perform an analysis for each market participant to determine if **Virtual Bid Screening** is required for bidding in the Day-ahead market. This analysis will be performed as follows:

1. For each participant account, PJMSettlement will calculate an **Uncleared Bid Exposure**. $\text{Uncleared Bid Exposure} = \text{sum of (not-cleared bids and offers} \times \text{the Nodal Reference Price)}$ summed over all nodes for the prior two days of actual bids. If a participant submits uncleared bids and uncleared offers at the same node or aggregated price point, only the higher of the two megawatt quantities (i.e., either the sum of all of the participant's bids at such node or the sum of all of the participant's offers at such node) shall be considered for purposes of this calculation.

2. If the Uncleared Bid Exposure exceeds the Participant's Unsecured Credit and/or Financial Security, less any credit required for FTR or other credit requirement determinants as defined in this policy, then Virtual Bid Screening will be required.

3. PJM Settlement will initially look at historical activity beginning May 1, 2003 to determine which participants will require Virtual Bid Screening upon implementation of this procedure.

C. Virtual Bid Screening Process

If it is determined that Virtual Bid Screening is required for a market participant, the screening process will be conducted in the PJM eMKT web interface. The process will automatically reject all virtual bids and offers submitted by the PJM market participant if the participant's Credit Available for Virtual Bidding is exceeded by the **Virtual Credit Exposure** that is calculated based on the participant's submitted bids and offers as described below.

A Participant's Virtual Credit Exposure will be calculated on a daily basis for all virtual bids submitted by the market participant for the next operating day using the following equation:

Virtual Credit Exposure = the lesser of:

(i) ((total MWh bid or offered, whichever is greater, hourly at each node) x Nodal Reference Price x 2 days) summed over all nodes and all hours; or

(ii) (a) ((the total MWh bid or offered, whichever is greater, hourly at each node) x the Nodal Reference Price x 1 day) summed over all nodes and all hours; plus (b) ((the difference between the total bid MWh cleared and total offered MWh cleared hourly at each node) x Nodal Reference Price) summed over all nodes and all hours for the previous three cleared day-ahead markets.

A Participant's Credit Available for Virtual Bidding will be the Participant's Working Credit Limit less any unpaid billed and unbilled amounts owed to PJM Settlement, plus any current period unbilled amounts owed by PJM Settlement to the Participant, less any credit required for FTR or other credit requirement determinants as defined in this policy.

Each PJM Market Participant that is identified as requiring Virtual Bid Screening based on bidding history will be screened in the following manner: If the participant's Virtual Credit Exposure exceeds its Credit Available for Virtual Bidding, the Market Participant will be notified via an eMKT error message, and the submitted bids will be rejected. Upon such notification, the Market Participant may alter its virtual bids and offers so that its Virtual Credit Exposure does not exceed its Credit Available for Virtual Bidding, and may resubmit them. Bids may be submitted in one or more groups during a day. If one or more groups of bids is submitted and accepted, and a subsequent group of submitted bids causes the total submitted bids to exceed the Virtual Credit Exposure, then only that subsequent set of bids will be rejected. Previously accepted bids will not be affected, though the Market Participant may choose to withdraw them voluntarily.

IV. RELIABILITY PRICING MODEL AUCTION CREDIT REQUIREMENTS

Settlement during any Delivery Year of cleared positions resulting or expected to result from any Reliability Pricing Model Auction shall be included as appropriate in Peak Market Activity, and the provisions of this Attachment Q shall apply to any such activity and obligations arising therefrom. In addition, the provisions of this section shall apply to any entity seeking to participate in any RPM Auction, to address credit risks unique to such auctions.

A. Applicability

A Market Seller seeking to submit a Sell Offer in any Reliability Pricing Model Auction based on any Capacity Resource for which there is a materially increased risk of non-performance must satisfy the credit requirement specified in section IV.B before submitting such Sell Offer. Credit must be maintained until such risk of non-performance is substantially eliminated, but may be reduced commensurate with the reduction in such risk, as set forth in Section IV.C.

For purposes of this provision, a resource for which there is a materially increased risk of non-performance shall mean: (i) a Planned Generation Capacity Resource; (ii) a Planned Demand Resource or an Energy Efficiency Resource; (iii) a Qualifying Transmission Upgrade; or (iv) an existing or Planned Generation Capacity Resource located outside the PJM Region that at the time it is submitted in a Sell Offer has not secured firm transmission service to the border of the PJM Region sufficient to satisfy the deliverability requirements of the Reliability Assurance Agreement.

B. Reliability Pricing Model Auction Credit Requirement

For any resource specified in Section IV.A, the credit requirement shall be the RPM Auction Credit Rate, as provided in Section IV.D, times the megawatts to be offered for sale from such resource in a Reliability Pricing Model Auction. As set forth in Section IV.D, the Auction Credit Requirement shall be determined separately for each Delivery Year. The RPM Auction Credit Requirement for each Market Seller shall be the sum of the credit requirements for all such resources to be offered by such Market Seller in the auction.

C. Reduction in Credit Requirement

The RPM Auction Credit Requirement for a Market Seller will be reduced for any Delivery Year to the extent less than all of such Market Seller's offers clear in the Base Residual Auction or any Incremental Auction for such Delivery Year. Such reduction shall be proportional to the quantity, in megawatts, that failed to clear in such Delivery Year. As specified in Section IV.D, the RPM Auction Credit Rate also may be reduced under certain circumstances after the auction has closed.

In addition, the RPM Auction Credit Requirement for a Participant for any given Delivery Year shall be reduced periodically, provided the Participant successfully meets progress milestones that reduce the risk of non-performance, as follows:

- a. For Planned Demand Resources and Energy Efficiency Resources, the RPM Auction Credit Requirement will be reduced in direct proportion to the megawatts of such Demand Resource or ILR that the Resource Provider qualifies as a Capacity Resource, in accordance with the procedures established under the Reliability Assurance Agreement.
- b. For existing Generation Capacity Resources located outside the PJM Region that have not secured sufficient firm transmission to the border of the PJM Region prior to the auction in which such resource is first offered, the RPM Credit Requirement shall be reduced in direct proportion to the megawatts of firm transmission service secured by the Market Seller that qualify such resource under the deliverability requirements of the Reliability Assurance Agreement.
- c. For Planned Generation Capacity Resources, the RPM Credit Requirement shall be reduced to 50% of the amount calculated under Section IV.B beginning as of the effective date of an Interconnection Service Agreement, and shall be reduced to zero on the date of commencement of Interconnection Service.
- d. For Planned Generation Capacity Resources located outside the PJM Region, the RPM Credit Requirement shall be reduced once the conditions in both b and c above are met, i.e., the RPM Credit Requirement shall be reduced to 50% of the amount calculated under Section IV.B when 1) beginning as of the effective date of the equivalent Interconnection Service Agreement, and 2) when 50% or more megawatts of firm transmission service have been secured by the Market Seller that qualify such resource under the deliverability requirements of the Reliability Assurance Agreement. The RPM Credit Requirement for a Planned Generation Capacity Resource located outside the PJM Region shall be reduced to zero when 1) the resource commences Interconnection Service and 2) 100% of the megawatts of firm transmission service have been secured by the Market Seller that qualify such resource under the deliverability requirements of the Reliability Assurance Agreement.
- e. For Qualifying Transmission Upgrades, the RPM Credit Requirement shall be reduced to 50% of the amount calculated under Section IV.B beginning as of the effective date of the latest associated Interconnection Service Agreement (or, when a project will have no such agreement, an Upgrade Construction Service Agreement), and shall be reduced to zero on the date the Qualifying Transmission Upgrade is placed in service. In addition, a Qualifying Transmission Upgrade will be allowed a reduction in its RPM Credit Requirement equal to the amount of collateral currently posted with PJM for the facility construction when the Qualifying Transmission Upgrade meets the following requirements: the Upgrade Construction Service Agreement has been fully executed, the full estimated cost to complete as most recently determined or updated by PJM has been fully paid or collateralized, and all regulatory and other required approvals (except those that must await construction completion) have been obtained. Such reduction in RPM Credit Requirement may not be transferred across different projects.

D. RPM Auction Credit Rate

As set forth in the PJM Manuals, a separate Auction Credit Rate shall be calculated for each Delivery year prior to each Reliability Pricing Model Auction for such Delivery Year, as follows:

For Delivery Years through the Delivery Year that ends on May 31, 2012, the Auction Credit Rate for any resource for a Delivery Year shall be (the greater of \$20/MW-day or 0.24 times the Capacity Resource Clearing Price in the Base Residual Auction for such Delivery Year for the Locational Deliverability Area within which the resource is located) times the number of days in such Delivery Year.

For Delivery Years beginning with the Delivery Year that commences on June 1, 2012:

- a. Prior to the posting of the results of a Base Residual Auction for a Delivery Year, the Auction Credit Rate shall be (the greater of (i) 0.3 times the Net Cost of New Entry for the PJM Region for such Delivery Year, in MW-day or (ii) \$20 per MW-day) times the number of days in such Delivery Year.
- b. Subsequent to the posting of the results from a Base Residual Auction, the Auction Credit Rate used for ongoing credit requirements for supply committed in such auction shall be (the greater of \$20/MW-day or 0.2 times the Capacity Resource Clearing Price in such auction for the Locational Deliverability Area within which the resource is located) times the number of days in such Delivery Year; provided, however, that the Auction Credit Rate for Capacity Resources to the extent committed in the Base Residual Auction for the 2012-2013 Delivery Year shall be as determined under the provisions of this Attachment Q in effect at the time of such Base Residual Auction.
- c. For any resource not previously committed for a Delivery Year that seeks to participate in an Incremental Auction, the Auction Credit Rate shall be (the greater of (i) 0.3 times the Net Cost of New Entry for the PJM Region for such Delivery Year, in MW-day or (ii) 0.24 times the Capacity Resource Clearing Price in the Base Residual Auction for such Delivery Year for the Locational Deliverability Area within which the resource is located or (iii) \$20 per MW-day) times the number of days in such Delivery Year.
- d. Subsequent to the posting of the results of an Incremental Auction, the Auction Credit Rate used for ongoing credit requirements for supply committed in such auction shall be (the greater of \$20/MW-day or 0.2 times the Capacity Resource Clearing Price in such auction for the Locational Deliverability Area within which the resource is located, but no greater than the Auction Credit Rate previously established for such resource's participation in such Incremental Auction pursuant to subsection (c) above) times the number of days in such Delivery Year.

E. Additional Form of Unsecured Credit for RPM

In addition to the forms of credit specified elsewhere in this Attachment Q, the following form of Unsecured Credit shall be available to Market Sellers, but solely for purposes of satisfying RPM Auction Credit Requirements. If a supplier has a history of being a net seller into PJM markets, on average, over the past 12 months, then PJM Settlement will count as available Unsecured

Credit twice the average of that participant's total net monthly PJM Settlement bills over the past 12 months.

F. Credit Responsibility for Traded Planned RPM Capacity Resources

PJM Settlement may require that credit and financial responsibility for planned RPM Capacity Resources that are traded remain with the original party (which for these purposes, means the party bearing credit responsibility for the planned RPM Capacity Resource immediately prior to trade) unless the receiving party independently establishes consistent with the PJM credit policy, that it has sufficient credit with PJM Settlement and agrees by providing written notice to ~~the PJM Settlement Treasury Department~~ that it will fully assume the credit responsibility associated with the traded planned RPM Capacity Resource.

V. FINANCIAL TRANSMISSION RIGHT AUCTIONS

A. FTR Credit Limit.

PJM Settlement will establish an FTR Credit Limit for each Participant. Participants must maintain their FTR Credit Limit at a level equal to or greater than their FTR Credit Requirement. FTR Credit Limits will be established only by a Participant providing Financial Security or qualifying for Seller Credit as provided for in §II.C of this policy.

B. FTR Credit Requirement.

For each Participant with FTR activity, PJM Settlement shall calculate an FTR Credit Requirement based on FTR cost less a discounted historical value. FTR Credit Requirements shall be further adjusted by ARR credits available and by an amount based on portfolio diversification, if applicable. The requirement will be based on individual monthly exposures which are then used to derive a total requirement.

The FTR Credit Requirement shall be calculated by first adding for each month the FTR Monthly Credit Requirement Contribution for each submitted, accepted, and cleared FTR and then subtracting the prorated value of any ARRs held by the Participant for that month. The resulting twelve monthly subtotals represent the expected value of net payments between PJM Settlement and the Participant for FTR activity each month during the Planning Period. Subject to later adjustment by an amount based on portfolio diversification, if applicable, the FTR Credit Requirement shall be the sum of the individual positive monthly subtotals, representing months in which net payments to PJM Settlement are expected.

C. Rejection of FTR Bids.

Bids submitted into an auction will be rejected if the Participant's FTR Credit Requirement including such submitted bids would exceed the Participant's FTR Credit Limit, or if the

Participant fails to establish additional credit as required pursuant to provisions related to portfolio diversification.

D. FTR Credit Collateral Returns.

A Market Participant may request from PJM Settlement the return of any collateral no longer required for the FTR auctions. PJM Settlement is permitted to limit the frequency of such requested collateral returns, provided that collateral returns shall be made by PJM Settlement at least once per calendar quarter, if requested by a Market Participant.

E. Effective Period for Credit for Multi-Month FTR Auction Products.

Credit for all FTR auction products must remain in effect for the entire duration of the FTR auction product. If a Corporate Guaranty or Financial Security provided for FTR credit has a termination date, such termination date must be at least 10 days after the date upon which payment is due for the last month of the FTR auction product.

F. Credit Responsibility for Traded FTRs.

PJM Settlement may require that credit responsibility associated with an FTR traded within PJM's eFTR system remain with the original party (which for these purposes, means the party bearing credit responsibility for the FTR immediately prior to trade) unless and until the receiving party independently establishes, consistent with the PJM credit policy, sufficient credit with PJM Settlement and agrees through confirmation of the FTR trade within the eFTR system that it will meet in full the credit requirements associated with the traded FTR.

G. Portfolio Diversification.

Subsequent to calculating a tentative cleared solution for an FTR auction (or auction round), PJM shall both:

1. Determine the FTR Portfolio Auction Value, including the tentative cleared solution. Any Participants with such FTR Portfolio Auction Values that are negative shall be deemed FTR Flow Undiversified.
2. Measure the geographic concentration of the FTR Flow Undiversified portfolios by testing such portfolios using a simulation model including, one at a time, each planned transmission outage or other network change which would substantially affect the network for the specific auction period. A list of such planned outages or changes anticipated to be modeled shall be posted prior to commencement of the auction (or auction round). Any FTR Flow Undiversified portfolio that experiences a net reduction in calculated congestion credits as a result of any one or more of such modeled outages or changes shall be deemed FTR Geographically Undiversified.

For portfolios that are FTR Flow Undiversified but not FTR Geographically Undiversified, PJM Settlement shall increment the FTR Credit Requirement by an amount equal to twice the

absolute value of the FTR Portfolio Auction Value, including the tentative cleared solution. For Participants with portfolios that are both FTR Flow Undiversified and FTR Geographically Undiversified, PJMSettlement shall increment the FTR Credit Requirement by an amount equal to three times the absolute value of the FTR Portfolio Auction Value, including the tentative cleared solution. For portfolios that are FTR Flow Undiversified in months subsequent to the current planning year, these incremental amounts, calculated on a monthly basis, shall be reduced (but not below zero) by an amount up to 25% of the monthly value of ARR credits that are held by a Participant. Subsequent to the ARR allocation process preceding an annual FTR auction, such ARRs credits shall be reduced to zero for months associated with that ARR allocation process. PJMSettlement may recalculate such ARR credits at any time, but at a minimum shall do so subsequent to each annual FTR auction. If a reduction in such ARR credits at any time increases the amount of credit required for the Participant beyond its credit available for FTR activity, the Participant must increase its credit to eliminate the shortfall.

If the FTR Credit Requirement for any Participant exceeds its credit available for FTRs as a result of these diversification requirements for the tentatively cleared portfolio of FTRs, PJMSettlement shall immediately issue a demand for additional credit, and such demand must be fulfilled before 4:00 p.m. on the business day following the demand. If any Participant does not timely satisfy such demand, PJMSettlement, in coordination with PJM, shall cause the removal of that Participant's entire set of bids for that FTR auction (or auction round) and a new cleared solution shall be calculated for the entire auction (or auction round).

If necessary, PJM shall repeat the auction clearing calculation. PJM shall repeat these portfolio diversification calculations subsequent to any such secondary clearing calculation, and PJMSettlement shall require affected Participants to establish additional credit.

H. FTR Administrative Charge Credit Requirement

In addition to any other credit requirements, PJMSettlement may apply a credit requirement to cover the maximum administrative fees that may be charged to a Participant for its bids and offers.

I. Long-Term FTR Credit Recalculation

Long-term FTR Credit Requirement calculations shall be updated annually for known history, consistent with updating of historical values used for FTR Credit Requirement calculations in the annual auctions.

VI. FORMS OF FINANCIAL SECURITY

Participants that provide Financial Security must provide the security in a PJMSettlement approved form and amount according to the guidelines below.

Financial Security which is no longer required to be maintained under provisions of the Agreements shall be returned at the request of a participant no later than two Business Days following determination by PJMSettlement within a commercially reasonable period of time that such collateral is not required.

Except when an event of default has occurred, a Participant may substitute an approved PJMSettlement form of Financial Security for another PJMSettlement approved form of Financial Security of equal value. The Participant must provide three (3) Business Days notice to PJMSettlement of its intent to substitute the Financial Security. PJMSettlement will release the replaced Financial Security with interest, if applicable, within (3) Business Days of receiving an approved form of substitute Financial Security.

A. Cash Deposit

Cash provided by a Participant as Financial Security will be held in a depository account by PJMSettlement with interest earned at PJMSettlement's overnight bank rate, and accrued to the Participant. Interest shall be paid to the Participant upon written request, but not more often than quarterly. PJMSettlement also may establish an array of investment options among which a Participant may choose to invest its cash deposited as Financial Security. Such investment options shall be comprised of high quality debt instruments, as determined by PJMSettlement, and may include obligations issued by the federal government and/or federal government sponsored enterprises. These investment options will reside in accounts held in PJMSettlement's name in a banking or financial institution acceptable to PJMSettlement. Where practicable, PJMSettlement may establish a means for the Participant to communicate directly with the bank or financial institution to permit the Participant to direct certain activity in the PJMSettlement account in which its Financial Security is held. PJMSettlement will establish and publish procedural rules, identifying the investment options and respective discounts in collateral value that will be taken to reflect any liquidation, market and/or credit risk presented by such investments. PJMSettlement has the right to liquidate all or a portion of the account balances at its discretion to satisfy a Participant's Total Net Obligation to PJMSettlement in the event of default under this credit policy or one or more of the Agreements.

B. Letter Of Credit

An unconditional, irrevocable standby letter of credit can be utilized to meet the Financial Security requirement. As stated below, the form, substance, and provider of the letter of credit must all be acceptable to PJMSettlement.

- The letter of credit will only be accepted from U.S.-based financial institutions or U.S. branches of foreign financial institutions ("financial institutions") that have a minimum corporate debt rating of "A" by Standard & Poor's or Fitch Ratings, or "A2" from Moody's Investors Service, or an equivalent short term rating from one of these agencies. PJMSettlement will consider the lowest applicable rating to be the rating of the financial institution. If the rating of a financial institution providing a letter of credit is lowered below A/A2 by any rating agency, then PJMSettlement may require the Participant to provide a letter of credit from another financial institution that is rated A/A2 or better, or

to provide a cash deposit. If a letter of credit is provided from a U.S. branch of a foreign institution, the U.S. branch must itself comply with the terms of this credit policy, including having its own acceptable credit rating.

- The letter of credit shall state that it shall renew automatically for successive one-year periods, until terminated upon at least ninety (90) days prior written notice from the issuing financial institution. If PJM or PJMSettlement receives notice from the issuing financial institution that the current letter of credit is being cancelled, the Participant will be required to provide evidence, acceptable to PJMSettlement, that such letter of credit will be replaced with appropriate Financial Security, effective as of the cancellation date of the letter of credit, no later than thirty (30) days before the cancellation date of the letter of credit. Failure to do so will constitute a default under this credit policy and one of more of the Agreements.
- The letter of credit must clearly state the full names of the "Issuer", "Account Party" and "Beneficiary" (PJMSettlement), the dollar amount available for drawings, and shall specify that funds will be disbursed upon presentation of the drawing certificate in accordance with the instructions stated in the letter of credit. The letter of credit should specify any statement that is required to be on the drawing certificate, and any other terms and conditions that apply to such drawings.
- The PJMSettlement Credit Application contains an acceptable form of a letter of credit that should be utilized by a Participant choosing to meet its Financial Security requirement with a letter of credit. If the letter of credit varies in any way from the PJMSettlement format, it must first be reviewed and approved by PJMSettlement. All costs associated with obtaining and maintaining a letter of credit and meeting the policy provisions are the responsibility of the Participant
- PJMSettlement may accept a letter of credit from a Financial Institution that does not meet the credit standards of this policy provided that the letter of credit has third-party support, in a form acceptable to PJMSettlement, from a financial institution that does meet the credit standards of this policy.

VII. POLICY BREACH AND EVENTS OF DEFAULT

A Participant will have two Business Days from notification of Breach (including late payment notice) or notification of a Collateral Call to remedy the Breach or satisfy the Collateral Call in a manner deemed acceptable by PJMSettlement. Failure to remedy the Breach or satisfy such Collateral Call within such two Business Days will be considered an event of default. If a Participant fails to meet the requirements of this policy but then remedies the Breach or satisfies a Collateral Call within the two Business Day cure period, then the Participant shall be deemed to have complied with the policy. Any such two Business Day cure period will expire at 4:00 p.m. eastern prevailing time on the final day.

Only one cure period shall apply to a single event giving rise to a breach or default. Application of Financial Security towards a non-payment Breach shall not be considered a satisfactory cure of the Breach if the Participant fails to meet all requirements of this policy after such application.

Failure to comply with this policy (except for the responsibility of a Participant to notify PJM Settlement of a Material change) shall be considered an event of default. Pursuant to § 15.1.3(a) of the Operating Agreement of PJM Interconnection, L.L.C. and § 1.7.3 of the PJM Open Access Transmission Tariff, non-compliance with the PJM Settlement credit policy is an event of default under those respective Agreements. In event of default under this credit policy or one or more of the Agreements, PJM Settlement, in coordination with PJM, will take such actions as may be required or permitted under the Agreements, including but not limited to the termination of the Participant's ongoing Transmission Service and participation in PJM Markets. PJM Settlement has the right to liquidate all or a portion of a Participant's Financial Security at its discretion to satisfy Total Net Obligations to PJM Settlement in the event of default under this credit policy or one or more of the Agreements.

PJM Settlement may hold a defaulting Participant's Financial Security for as long as such party's positions exist ~~at PJM~~ and consistent with the PJM credit policy in this Attachment Q, in order to protect PJM's membership from default.

No payments shall be due to a Participant, nor shall any payments be made to a Participant, while the Participant is in default or has been declared in Breach of this policy or the Agreements, or while a Collateral Call is outstanding. PJM Settlement may apply towards an ongoing default any amounts that are held or later become available or due to the defaulting Participant through PJM's markets and systems.

In order to cover Obligations, PJM Settlement, may hold a Participant's Financial Security through the end of the billing period which includes the 90th day following the last day a Participant had activity, open positions, or accruing obligations (other than reconciliations and true-ups) ~~at PJM~~, and until such Participant has satisfactorily paid any obligations invoiced through such period. Obligations incurred or accrued through such period shall survive any withdrawal from PJM. In event of non-payment, PJM Settlement may apply such Financial Security to such Participant's Obligations, even if Participant had previously announced and effected its withdrawal from PJM.

VII. DEFINITIONS:

Affiliate

Affiliate is defined in the PJM Operating Agreement, §1.2.

Agreements

Agreements are the Operating Agreement of PJM Interconnection, L.L.C., the PJM Open Access Transmission Tariff, the Reliability Assurance Agreement, the Reliability Assurance Agreement – West, and/or other agreements between PJM Interconnection, L.L.C. and its Members.

Applicant

Applicant is an entity desiring to become a PJM Member, or to take Transmission Service that has submitted the PJM [Settlement](#) Credit Application, PJM [Settlement](#) Credit Agreement and other required submittals as set forth in this policy.

Breach

Breach is the status of a Participant that does not currently meet the requirements of this policy or other provisions of the Agreements.

Business Day

A Business Day is a day in which the Federal Reserve System is open for business and is not a scheduled PJM holiday.

Canadian Guaranty

Canadian Guaranty is a Corporate Guaranty provided by an Affiliate of a Participant that is domiciled in Canada, and meets all of the provisions of this credit policy.

Capacity

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

Collateral Call

Collateral Call is a notice to a Participant that additional Financial Security, or possibly early payment, is required in order to remain in, or to regain, compliance with this policy.

Corporate Guaranty

Corporate Guaranty is a legal document used by one entity to guaranty the obligations of another entity.

Credit Available for Virtual Bidding

Credit Available for Virtual Bidding is a Participant's Working Credit Limit, less its Total Net Obligation.

Credit Score

Credit Score is a composite numerical score scaled from 0-100 as calculated by PJM [Settlement](#) that incorporates various predictors of creditworthiness.

Financial Security

Financial Security is a cash deposit or letter of credit in an amount and form determined by and acceptable to PJM [Settlement](#), provided by a Participant to PJM [Settlement](#) as security in order to participate in the PJM Markets or take Transmission Service.

Foreign Guaranty

Foreign Guaranty is a Corporate Guaranty provided by an Affiliate of a Participant that is domiciled in a foreign country, and meets all of the provisions of this credit policy.

FTR Credit Limit

FTR Credit Limit will be equal to the amount of credit established with PJM Settlement that a Participant has specifically designated to PJM Settlement to be set aside and used for FTR activity. Any such credit so set aside shall not be considered available to satisfy any other credit requirement the Participant may have with PJM Settlement at PJM.

FTR Credit Requirement

FTR Credit Requirement is the amount of credit that a Participant must provide in order to support the FTR positions that it holds and/or is bidding for. The FTR Credit Requirement shall not include months for which the invoicing has already been completed, provided that PJM Settlement shall have up to two Business Days following the date of the invoice completion to make such adjustments in its credit systems.

FTR Flow Undiversified

FTR Flow Undiversified shall have the meaning established in section V.G of this Attachment Q.

FTR Geographically Undiversified

FTR Geographically Undiversified shall have the meaning established in section V.G of this Attachment Q.

FTR Historical Value

FTR Historical Value – For each FTR for each month, this is the historical weighted average value over three years for the FTR path using the following weightings: 50% - most recent year; 30% - second year; 20% - third year. FTR Historical Values shall be calculated separately for on-peak, off-peak, and 24-hour FTRs for each month of the year. FTR Historical Values shall be adjusted by plus or minus ten percent (10%) for cleared counterflow or normal flow FTRs, respectively, in order to mitigate exposure due to uncertainty and fluctuations in actual FTR value.

FTR Monthly Credit Requirement Contribution

FTR Monthly Credit Requirement Contribution - For each FTR for each month, this is 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 Portfolio Auction Value

FTR Portfolio Auction Value shall mean for each Participant (or Participant account), the sum, calculated on a monthly basis, across all FTRs, of the FTR price times the FTR volume in MW. For the purpose of determining portfolio diversification and the associated FTR credit requirement for a load serving Participant, negatively priced FTRs that sink at their load location

(as determined from the effective ARR allocation) shall be excluded from this calculation. However, for the purposes of this calculation, the MW quantity of FTRs shall not exceed the peak load of the load serving Participant at each location.

Market Participant

Market Participant shall have the meaning provided in the Operating Agreement.

Material

For these purposes, material is defined in §I.B.3, Material Changes. For the purposes herein, the use of the term "material" is not necessarily synonymous with use of the term by governmental agencies and regulatory bodies.

Member

Member shall have the meaning provided in the Operating Agreement.

Net Obligation

Net Obligation is the amount owed to PJM Settlement and PJM for purchases from the PJM Markets, Transmission Service, (under both Part II and Part III of the O.A.T.T.), and other services pursuant to the Agreements, after applying a deduction for amounts owed to a Participant by PJM Settlement 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 is the amount of Net Obligation when Net Obligation is negative.

Nodal Reference Price

Nodal Reference Price is a probabilistic (97%) maximum price differential historically experienced between day-ahead and real-time market prices at a given location as defined in this policy period. This number is used in Virtual Bid Screening.

Obligation

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

Operating Agreement of PJM Interconnection, L.L.C., (“Operating Agreement”)

The Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., dated as of June 2, 1997, on file with the Federal Energy Regulatory Commission, and as revised from time to time.

Participant

A Participant is a Market Participant and/or Transmission Customer and/or Applicant.

Peak Market Activity

Peak Market Activity is 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 section II.D of this Credit Policy.

PJM Markets

The PJM Markets are the PJM Interchange Energy Market and the PJM Capacity markets as established by the Operating Agreement. Also any other markets that exist or may be established in the future wherein Participants may incur Obligations to PJM [Settlement](#).

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

The Open Access Transmission Tariff of PJM Interconnection, L.L.C., on file with the Federal Energy Regulatory Commission, and as revised from time to time.

Reliability Assurance Agreement (“R.A.A.”)

See the definition of the Reliability Assurance Agreement (“R.A.A.”) in the Operating Agreement.

Seller Credit

A Seller Credit is a form of Unsecured Credit extended to Participants that have a consistent long-term history of selling into PJM [Markets](#), as defined in this document.

Tangible Net Worth

Tangible Net Worth is all assets (not including any intangible assets such as goodwill) less all liabilities. Any such calculation may be reduced by PJM [Settlement](#) upon review of the available financial information.

Total Net Obligation

Total Net Obligation is all unpaid billed Net Obligations plus any unbilled Net Obligation incurred to date, as determined by PJM [Settlement](#) on a daily basis, plus any other Obligations owed to PJM [Settlement](#) at the time.

Total Net Sell Position

Total Net Sell Position is all unpaid billed Net Sell Positions plus any unbilled Net Sell Positions accrued to date, as determined by PJM [Settlement](#) on a daily basis.

Transmission Customer

Transmission Customer is a Transmission Customer is an entity taking service under Part II or Part III of the O.A.T.T.

Transmission Service

Transmission Service is any or all of the transmission services provided by PJM pursuant to Part II or Part III of the O.A.T.T.

Uncleared Bid Exposure

Uncleared Bid Exposure is a measure of exposure from virtual bidding activity relative to a Participant's established credit as defined in this policy. It is used only as a pre-screen to determine whether a Participant's virtual bids should be subject to Virtual Bid Screening.

Unsecured Credit

Unsecured Credit is any credit granted by PJM [Settlement](#) to a Participant that is not secured by a form of Financial Security.

Unsecured Credit Allowance

Unsecured Credit Allowance is Unsecured Credit extended by PJM [Settlement](#) in an amount determined by PJM [Settlement](#)'s evaluation of the creditworthiness of a Participant. This is also defined as the amount of credit that a Participant qualifies for based on the strength of its own financial condition without having to provide Financial Security, except that only the Seller Credit form of Unsecured Credit may be utilized to establish a Participant's FTR Credit Limit. See also: "Working Credit Limit."

Virtual Bid Screening

Virtual Bid Screening is the process of reviewing the Virtual Credit Exposure of submitted Day-Ahead market bids, as defined in this policy, against the Credit Available for Virtual Bidding. If the credit required is greater than credit available, then the bids will not be accepted.

Virtual Credit Exposure

Virtual Credit Exposure is the amount of potential credit exposure created by a market participant's bid submitted into the Day-ahead market, as defined in this policy.

Working Credit Limit

Working Credit Limit amount is 75% of the Participant's Unsecured Credit Allowance and/or 75% of the Financial Security provided by the Participant to PJM [Settlement](#). The Working Credit Limit establishes the maximum amount of Total Net Obligation that a Participant may have outstanding at any time.

**Revisions to Existing Sections of the
PJM Tariff
(Non-Redline Version)**

OATT OPEN ACCESS TRANSMISSION TARIFF - OATT VI. ADMINISTRATION AND STUDY OF NEW SERVICE R - OATT SCHEDULE 9

**SCHEDULE 9
PJM Interconnection, L.L.C. Administrative Services**

a) PJM Interconnection, L.L.C. is the Transmission Provider under this Tariff. It also operates the PJM Interchange Energy Market as described in the Appendix to Attachment K of this Tariff and provides various other services to market participants. The cost of operating the PJM Interconnection, L.L.C., including principal and/or depreciation expense, interest expense and financing costs, shall be recovered from users of the various PJM services pursuant to the rates set forth in this Schedule 9 and its subsidiary Schedules which correspond to categories of services (“Service Categories”) provided by PJM. The charge in any month to any user of PJM’s services under this Schedule 9 is the sum of the charges under the following subsidiary Schedules of this Schedule 9 to the extent determined to be applicable by the Transmission Provider to such user in such month:

Schedule 9-1:	“Control Area Administration Service”
Schedule 9-2:	“Financial Transmission Rights Administration Service”
Schedule 9-3:	“Market Support Service”
Schedule 9-4:	“Regulation and Frequency Response Administration Service”
Schedule 9-5:	“Capacity Resource and Obligation Management Service”

b) The rates, terms, conditions, and applicability of these subsidiary services of this Schedule 9 are set forth on the subsidiary Schedules of this Schedule 9. These rates and charges in Schedule 9 and its subsidiary Schedules do not include the charges for PJMSettlement services to Transmission Customers and Market Participants. Transmission Provider will remit the portion of the charges for PJMSettlement services to PJMSettlement.

c) In addition to subsidiary schedules 9-1 through 9-5, this Schedule 9 also includes the following separate subsidiary schedules: (i) Schedule 9-6 Formula Rate for Costs of PJM Advanced Second Control Center, which is designed to recover certain costs associated with the advanced second control center; (ii) Schedule 9-FERC, which is designed to recover Transmission Provider’s costs for the annual charges assessed on Transmission Provider by FERC; and (iii) Schedule 9-OPSI, which is designed to recover Transmission Provider’s payments to the Organization of PJM States, Inc.; (iv) Schedule 9-MMU which is designed to recover the cost of providing market monitoring functions to the PJM Region; and (v) Schedule 9-FINCON, which is designed to recover Transmission Provider’s costs of outside consultants engaged by the Finance Committee.

d) For purposes of establishing the rates under this Schedule 9, PJM’s capital costs (including depreciation and/or principal, interest expense, and financing costs, but not including operation and maintenance expenses) of acquiring from certain transmission facility owners the capital projects and related assets, rights and licenses (“Facilities Costs”) that are the subject of an agreement that PJM has reached with such owners to purchase certain hardware, software, and similar assets that were funded by the owners and used by PJM (“Facilities Agreement”)

shall be included in PJM's rates pursuant to a rate moderation plan in accordance with the following requirements:

- (1) the Facilities Costs shall be phased in to PJM's rates and charges under this Schedule 9 over a period of five years;
- (2) the amount of Facilities Costs to be recovered by PJM in the first year of such phase-in shall be one-third of the annual amount of Facilities Costs projected (with such projection made prior to the first year, at the time when the first-year rates are determined under this Schedule 9) to be recovered in the third year of such phase-in (including any prior-year deferrals to be recovered in such third year);
- (3) the amount of Facilities Costs to be recovered by PJM in the second year of such phase-in shall be two-thirds of the annual amount of Facilities Costs projected (with such projection made prior to the second year, at the time when the second-year rates are determined under this Schedule 9) to be recovered in the third year of such phase-in (including any prior-year deferrals to be recovered in such third year).
- (4) the amount of Facilities Costs to be recovered by PJM in the third year of such phase-in shall be the annual amount of Facilities Costs in such year as determined by generally accepted accounting principles without regard to any rate moderation plan, plus the deferrals and financing costs described in (5) below.
- (5) the Facilities Costs that are not recovered in the first and second years of the phase-in will be deferred and recovered (with PJM's costs of financing such deferrals) beginning in the third year of the phase-in; provided, however, that no more than one-third of the total costs deferred from the first and second years (and PJM's costs of financing such deferrals) will be recovered in the third year.
- (6) all deferred costs (and all of PJM's costs of financing such deferrals) will be collected in full by the end of the fifth year.

OATT OPEN ACCESS TRANSMISSION TARIFF - OATT VI. ADMINISTRATION AND STUDY OF NEW SERVICE R - OATT ATTACHMENT K – APPENDIX - OATT 5. CALCULATION OF CHARGES AND CREDITS FOR TRA - OATT 5.4 Transmission Loss Charge Calculation.

5.4 Transmission Loss Charge Calculation.

5.4.1 Calculation by Office of the Interconnection.

The Office of the Interconnection shall calculate Transmission Loss Charges for each Network Service User, the PJM Interchange Energy Market, and each Transmission Customer.

5.4.2 General.

(a) The basis for the Transmission Loss Charges shall be the differences in the Locational Marginal Prices, defined as the Loss Price at a bus, between points of delivery and points of receipt, as determined in accordance with Section 2 of this Schedule. (b) The Office of the Interconnection shall calculate Loss Prices in the form of Day-ahead Loss Prices and Real-time Loss Prices for the PJM Region, in accordance with Section 2 of this Schedule.

5.4.3 Network Service User Calculation.

(a) Each Network Service User shall be charged for the increased cost of transmission losses to deliver the output of its firm Capacity Resources or other owned or contracted for resources, its firm bilateral purchases, and its non-firm bilateral purchases. The Transmission Loss Charge for deliveries from each such source shall be the Network Service User's hourly losses net bill.

(b) Market Buyers shall be charged for transmission losses resulting from all load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served from the PJM Interchange Energy Market in the Day-ahead Energy Market at the Day-ahead Loss Price applicable to each relevant load bus.

(c) Generating Market Buyers shall be reimbursed for transmission losses resulting from all energy scheduled to be delivered to the PJM Interchange Energy Market in the Day-ahead Energy Market at the Day-ahead Loss Price applicable to each relevant generation bus.

(d) Market Sellers shall be reimbursed for transmission losses resulting from all energy scheduled to be delivered in the Day-ahead Energy Market at the Day-ahead Loss Prices applicable to each relevant generation bus.

(e) The hourly net amount of energy delivered at each generation bus is determined by revenue meter data, if available, or by the State Estimator, if revenue meter data is not available. The total load actually served at each load bus is initially determined by the State Estimator. For each Electric Distributor that reports hourly net energy flows from metered tie lines and for which all generators within the Electric Distributor's territory report revenue quality, hourly net energy delivered, the total revenue meter load within the Electric Distributor's territory is calculated as the sum of all net import energy flows reported by their tie revenue

meters and all net generation reported via generator revenue meters. The amount of load at each of such Electric Distributor's load buses calculated by the State Estimator is then adjusted, in proportion to its share of the total load of that Electric Distributor, in order that the total amount of load across all of the Electric Distributor's load buses matches its total revenue meter calculated load.

(f) At the end of each hour during an Operating Day, the Office of the Interconnection shall calculate the Transmission Loss Charges at each Market Buyer's load bus to be charged for losses at Real-time Loss Prices determined by the product of the hourly Real-time Loss Prices at the relevant bus times the Market Buyer's megawatts of load (net of operating Behind The Meter Generation, but not to be less than zero) at the bus in that hour in excess of the load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served at that bus in the hour in the Day-ahead Energy Market. To the extent that the load (net of operating Behind The Meter Generation, but not to be less than zero) actually served at a load bus is less than the load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served at that bus in the Day-ahead Energy Market, the Market Buyer shall be paid for the difference at the Real-time Loss Price for the load bus at the time of the shortfall. The megawatts of load at each load bus shall be the sum of the megawatts of load (net of operating Behind The Meter Generation, but not less than zero) for that bus of that Market Buyer plus any megawatts of that Market Buyer's bilateral sales attributable to that bus. The total load charge for each Market Buyer shall be the sum, for each of a Market Buyer's load buses, of the charges at Day-ahead Loss Price determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1a plus the charges at Real-time Loss Prices determined as specified herein, net of any payments specified herein for each of the Market Buyer's load buses.

(g) At the end of each hour during an Operating Day, the Office of the Interconnection shall calculate the transmission loss payments at each Generating Market Buyer's generation bus to be paid at Real-time Loss Prices, determined by the product of the hourly Real-time Loss Price at the relevant bus times the Generating Market Buyer's megawatts of generation at such generation bus in the hour in excess of the energy scheduled to be injected at that bus in that hour in the Day-ahead Energy Market. To the extent that the energy actually injected at the generation bus is less than the energy scheduled to be injected at that bus in the Day-ahead Energy Market, the Generating Market Buyer shall be debited for the difference at the Real-time Loss Price for the generation bus at the time of the shortfall. The megawatts of generation at each generation bus shall be the sum of the megawatts of generation for that bus of that Generating Market Buyer plus any megawatts of bilateral purchases of that Generating Market Buyer attributable to that bus. The total generation revenue for each Generating Market Buyer shall be the sum, for each of the Generating Market Buyer's generation buses, of the revenues at Day-ahead Loss Price determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1A plus the revenues at Real-time Loss Prices determined as specified herein, net of any debits specified herein for each of the Market Buyer's generation buses.

(h) A Market Seller shall be paid for transmission losses that results from the Real-time sales of Spot Market Energy to the extent of its hourly net deliveries to the PJM Region of

energy in excess of amounts scheduled in the Day-ahead Energy Market from the Market Seller's resources. For pool External Resources, the Office of the Interconnection shall model, based on an appropriate flow analysis, the hourly amounts delivered from each such resource to the corresponding Interface Pricing Point between adjacent Control Areas and the PJM Region. The total real-time generation revenues for each Market Seller shall be the sum of its credits determined by the product of (i) the hourly net amount of energy delivered to the PJM Region at the applicable generation or interface bus in excess of the amount scheduled to be delivered in that hour at that bus in the Day-ahead Energy Market from each of the Market Seller's resources, times (ii) the hourly Real-time Loss Price at that bus. To the extent that the energy actually injected at a generation bus or Interface Pricing Point in any hour is less than the energy scheduled to be injected at that bus or point in the Day-ahead Energy Market, the Market Seller shall be debited for the difference at the Real-time Loss Price for the applicable bus or point at the time of the shortfall times the amount of the shortfall. The total generation revenue for each Market Seller shall be the sum, for each of the Market Seller's generation buses or Interface Pricing Points, of the revenues at Day-ahead Loss Prices determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1A plus the revenues at Real-time Loss Prices determined as specified herein, net of any debits specified herein for each of the Market Seller's generation buses or Interface Pricing Points.

5.4.4 Transmission Customer Calculation.

Each Transmission Customer using Firm Point-to-Point Transmission Service (as defined in the PJM Tariff), and each Transmission Customer using Non-Firm Point-to-Point Transmission Service (as defined in the PJM Tariff), shall be charged for the increased cost of transmission losses for the delivery of energy using Point-to-Point Transmission Service. Except as specified in this subsection, a Transmission Loss Charge shall be assessed for transmission use scheduled in the Day-ahead Energy Market, calculated as the amount to be delivered multiplied by the difference between the Day-ahead Loss Price at the delivery point or the delivery interface at the boundary of the PJM Region and the Day-ahead Loss Price at the source point or the source interface at the boundary of the PJM Region. Transmission Loss Charges shall be assessed for real-time transmission use in excess of the amounts scheduled for each hour in the Day-ahead Energy Market, calculated as the excess amount multiplied by the difference between the Real-time Loss Price at the delivery point or the delivery interface at the boundary of the PJM Region, and the Real-time Loss Price at the source point or the source interface at the boundary of the PJM Region. A Transmission Customer shall be paid for Transmission Loss Charges for real-time transmission use falling below the amounts scheduled for each hour in the Day-ahead Energy Market, calculated as the shortfall amount multiplied by the difference between the Real-time Loss Price at the delivery point or the delivery interface at the boundary of the PJM Region, and the Real-time Loss Price at the source point or the source interface at the boundary of the PJM Region. Real-time deviations from the Point-to-Point Transmission Service scheduled in the Day-ahead Energy Market shall be determined by the lesser of the real-time injection or withdrawal associated with such transmission service.

5.4.5 Total Transmission Loss Charges.

Intra-PJM Tariffs

The total Transmission Loss Charges collected by the PJMSettlement each hour will be the aggregate net amounts determined as specified in this Schedule.

OATT OPEN ACCESS TRANSMISSION TARIFF - OATT VI. ADMINISTRATION AND STUDY OF NEW SERVICE R - OATT ATTACHMENT K – APPENDIX - OATT 7. FINANCIAL TRANSMISSION RIGHTS AUCTIONS - OATT 7.2 Financial Transmission Rights Characteristics

7.2 Financial Transmission Rights Characteristics.

7.2.1 Reconfiguration of Financial Transmission Rights.

Through an appropriate linear programming model, the Office of the Interconnection shall reconfigure the Financial Transmission Rights offered or otherwise available for sale in any auction to maximize the value to the bidders of the Financial Transmission Rights sold, provided that any Financial Transmission Rights acquired at auction shall be simultaneously feasible in combination with those Financial Transmission Rights outstanding at the time of the auction and not sold in the auction. The linear programming model shall, while respecting transmission constraints and the maximum MW quantities of the bids and offers, select the set of simultaneously feasible Financial Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers.

7.2.2 Specified Receipt and Delivery Points.

The Office of the Interconnection will post the list of available receipt and delivery points for each Financial Transmission Rights Auction before the start of the bidding window. Auction bids for annual Financial Transmission Rights Obligations may specify as receipt and delivery points any combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points. Auction bids for annual Financial Transmission Rights Options may specify as receipt and delivery points such combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points as the Office of the Interconnection shall allow from time to time as set forth in PJM Manual 06: Financial Transmission Rights. Auction bids for Financial Transmission Rights submitted in the monthly auctions may specify as receipt and delivery points any combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points for bids that cover any month beyond the next month, including bids that cover Planning Period Quarters or the Planning Period Balance. Auction bids for Financial Transmission Rights submitted in the monthly auctions that cover the single calendar month period immediately following the month in which the monthly auction is conducted may specify any combination of available receipt and delivery buses represented in the State Estimator model for which the Office of the Interconnection calculates and posts Locational Marginal Prices. Auction bids may specify available receipt and delivery points from locations outside of the PJM Region to locations inside such region, from locations within the PJM Region to locations outside such region, or to and from locations within the PJM Region.

7.2.3 Transmission Congestion Charges.

Financial Transmission Rights shall entitle holders thereof to credits only for Transmission Congestion Charges, and shall not confer a right to credits for payments arising from or relating to transmission congestion made to any entity other than the PJM Settlement.

OATT OPEN ACCESS TRANSMISSION TARIFF - OATT VI. ADMINISTRATION AND STUDY OF NEW SERVICE R - OATT ATTACHMENT Q

ATTACHMENT Q

PJM CREDIT POLICY

POLICY STATEMENT:

It is the policy of PJM Interconnection, LLC (“PJM”) that prior to an entity participating in the PJM Markets, or in order to take Transmission Service, the entity must demonstrate its ability to meet PJMSettlement’s credit requirements.

Prior to becoming a Market Participant, Transmission Customer, and/or Member of PJM, PJMSettlement must accept and approve a Credit Application (including Credit Agreement) from such entity and establish a Working Credit Limit with PJMSettlement. PJMSettlement shall approve or deny an accepted Credit Application on the basis of a complete credit evaluation including, but not be limited to, a review of financial statements, rating agency reports, and other pertinent indicators of credit strength.

POLICY INTENT:

This credit policy describes requirements for: (1) the establishment and maintenance of credit by Market Participants, Transmission Customers, and entities seeking either such status (collectively “Participants”), pursuant to one or more of the Agreements, and (2) forms of security that will be deemed acceptable (hereinafter the “Financial Security”) in the event that the Participant does not satisfy the financial or other requirements to establish Unsecured Credit.

This policy also sets forth the credit limitations that will be imposed on Participants in order to minimize the possibility of failure of payment for services rendered pursuant to the Agreements, and conditions that will be considered an event of default pursuant to this policy and the Agreements.

These credit rules may establish certain set-asides of credit for designated purposes (such as for FTR or RPM activity). Such set-asides shall be construed to be applicable to calculation of credit requirements only, and shall not restrict PJMSettlement’s ability to apply such designated credit to any obligation(s) in case of a default.

PJMSettlement may post on PJM’s web site, and may reference on OASIS, a supplementary document which contains additional business practices (such as algorithms for credit scoring) that are not included in this document. Changes to the supplementary document will be subject to stakeholder review and comment prior to implementation. PJMSettlement will notify any individual Participant that will have its Unsecured Credit Allowance reduced by 25% or more, or its Financial Security requirement increased by 25% or more by such change. PJMSettlement may specify a required compliance date, not less than 15 days from notification, by which time all Participants must comply with provisions that have been revised in the supplementary document.

APPLICABILITY:

This policy applies to all Participants.

IMPLEMENTATION:

I. CREDIT EVALUATION

Each Participant will be subject to a complete credit evaluation in order for PJMSettlement to determine creditworthiness and to establish an **Unsecured Credit Allowance**, if applicable; provided, however, that a Participant need not provide the information specified in section I.A or I.B if it notifies PJMSettlement in writing that it does not seek any Unsecured Credit Allowance. PJMSettlement will identify any necessary Financial Security requirements and establish a Working Credit Limit for each Participant. In addition, PJMSettlement will perform follow-up credit evaluations on at least an annual basis.

If a **Corporate Guaranty** is being utilized to establish credit for a Participant, the guarantor will be evaluated and the Unsecured Credit Allowance or Financial Security requirement will be based on the financial strength of the Guarantor.

PJMSettlement will provide a Participant, upon request, with a written explanation for any change in credit levels or collateral requirements. PJMSettlement will provide such explanation within ten Business Days.

If a Participant believes that either its level of unsecured credit or its collateral requirement has been incorrectly determined, according to this credit policy, then the Participant may send a request for reconsideration in writing to PJMSettlement. Such a request should include:

- A citation to the applicable section(s) of the PJMSettlement credit policy along with an explanation of how the respective provisions of the credit policy were not carried out in the determination as made
- A calculation of what the Participant believes should be the correct credit level or collateral requirement, according to terms of the credit policy

PJMSettlement will reconsider the determination and will provide a written response as promptly as practical, but no longer than ten Business Days of receipt of the request. If the Participant still feels that the determination is incorrect, then the Participant may contest that determination. Such contest should be in written form, addressed to PJMSettlement, and should contain:

- A complete copy of the Participant's earlier request for reconsideration, including citations and calculations
- A copy of PJMSettlement's written response to its request for reconsideration

- An explanation of why it believes that the determination still does not comply with the credit policy

PJMSettlement will investigate and will respond to the Participant with a final determination on the matter as promptly as practical, but no longer than 20 Business Days.

Neither requesting reconsideration nor contesting the determination following such request shall relieve or delay Participant's responsibility to comply with all provisions of this credit policy.

A. Initial Credit Evaluation

In completing the initial credit evaluation, PJMSettlement will consider:

1) Rating Agency Reports

In evaluating credit strength, PJMSettlement will review rating agency reports from Standard & Poor's, Moody's Investors Service, Fitch Ratings, or other nationally known rating agencies. The focus of the review will be on senior unsecured debt ratings; however, PJMSettlement will consider other ratings if senior unsecured debt ratings are not available.

2) Financial Statements and Related Information

Each Participant must submit with its application audited financial statements for the most recent fiscal quarter, as well as the most recent three fiscal years, or the period of existence of the Participant, if shorter. All financial and related information considered for a Credit Score must be audited by an outside entity, and must be accompanied by an unqualified audit letter acceptable to PJMSettlement.

The information should include, but not be limited to, the following:

- a. If publicly traded:
 - i. Annual and quarterly reports on Form 10-K and Form 10-Q, respectively.
 - ii. Form 8-K reports disclosing Material changes, if any.
- b. If privately held:
 - i. Management's Discussion & Analysis
 - ii. Report of Independent Accountants
 - iii. Financial Statements, including:
 - Balance Sheet
 - Income Statement
 - Statement of Cash Flows
 - Statement of Stockholder's Equity
 - iv. Notes to Financial Statements

If the above information is available on the Internet, the Participant may provide a letter stating where such statements may be located and retrieved by PJMSettlement. For certain Participants,

some of the above financial submittals may not be applicable, and alternate requirements may be specified by PJMSettlement.

In the credit evaluation of Cooperatives and Municipalities, PJMSettlement may request additional information as part of the overall financial review process and will consider other alternative measures in determining financial strength and creditworthiness. For Cooperatives and Municipalities, PJMSettlement will consider qualitative factors such as the following in its credit evaluation: taxing authority, independent ratemaking authority, financial strength of members that have contractual commitments to pay a cooperative's expenses, and other measures of size besides Tangible Net Worth.

3) References

PJMSettlement may request Participants to provide with their applications at least one (1) bank and three (3) utility credit references. In the case where a Participant does not have the required utility references, trade payable vendor references may be substituted.

4) Litigation, Commitments and Contingencies

Each Participant is also required to provide with its application information as to any known Material litigation, commitments or contingencies as well as any prior bankruptcy declarations or Material defalcations by the Participant or its predecessors, subsidiaries or Affiliates, if any. These disclosures shall be made upon application, upon initiation or change, and at least annually thereafter, or as requested by PJMSettlement.

5) Other Disclosures

Each Participant is required to disclose any Affiliates that are currently Members of PJMSettlement or are applying for membership within PJMSettlement. Each Participant is also required to disclose the existence of any ongoing investigations by the Securities and Exchange Commission ("SEC"), Federal Energy Regulatory Commission ("FERC"), or any other governing, regulatory, or standards body. These disclosures shall be made upon application, upon initiation or change, and at least annually thereafter, or as requested by PJMSettlement.

B. Ongoing Credit Evaluation

On at least an annual basis, PJMSettlement will perform follow-up credit evaluations on all Participants. In completing the credit evaluation, PJMSettlement will consider:

1) Rating Agency Reports

In evaluating credit strength, PJMSettlement will review rating agency reports from Standard & Poor's, Moody's Investors Service, Fitch Ratings, or other nationally known rating agencies. The focus of the review will be on senior unsecured debt ratings; however, PJMSettlement will consider other ratings if senior unsecured debt ratings are not available.

2) Financial Statements and Related Information

Each Participant must submit audited annual financial statements as soon as they become available and no later than 120 days after fiscal year end. Each Participant is also required to provide PJMSettlement with quarterly financial statements promptly upon their issuance, but no later than 60 days after the end of each quarter. All financial and related information considered for a Credit Score must be audited by an outside entity, and must be accompanied by an unqualified audit letter acceptable to PJMSettlement. If financial statements are not provided within the timeframe required, the Participant may not be granted an Unsecured Credit Allowance.

The information should include, but not be limited to, the following:

- a. If publicly traded:
 - i. Annual and quarterly reports on Form 10-K and Form 10-Q, respectively.
 - ii. Form 8-K reports disclosing Material changes, if any, immediately upon issuance.
- b. If privately held:
 - i. Management's Discussion & Analysis
 - ii. Report of Independent Accountants
 - iii. Financial Statements, including:
 - Balance Sheet
 - Income Statement
 - Statement of Cash Flows
 - Statement of Stockholder's Equity
 - iv. Notes to Financial Statements

If the above information is available on the Internet, the Participant may provide a letter stating where such statements may be located and retrieved by PJMSettlement. For certain Participants, some of the above financial submittals may not be applicable, and alternate requirements may be specified by PJMSettlement.

In the credit evaluation of Cooperatives and Municipalities, PJMSettlement may request additional information as part of the overall financial review process and will consider other alternative measures in determining financial strength and creditworthiness. For Cooperatives and Municipalities, PJMSettlement will consider qualitative factors such as the following in its credit evaluation: taxing authority, independent ratemaking authority, financial strength of members that have contractual commitments to pay a cooperative's expenses, and other measures of size besides Tangible Net Worth.

3) Material Changes

Each Participant is responsible for informing PJMSettlement immediately, in writing, of any Material change in its financial condition.

For the purpose of this policy, a Material change in financial condition may include, but not be limited to, any of the following:

- a. A downgrade of any debt rating by any rating agency;
- b. Being placed on a credit watch with negative implications by any rating agency;
- c. A bankruptcy filing;
- d. Insolvency;
- e. A report of a quarterly or annual loss or a decline in earnings of ten percent or more compared to the prior period;
- f. Restatement of prior financial statements;
- g. The resignation of key officer(s); or
- h. The filing of a lawsuit that could adversely impact any current or future financial results by ten percent or more.

If there is a Material change in the financial condition of the Participant, PJMSettlement may require the Participant to provide Financial Security within two Business Days, in an amount and form approved by PJMSettlement. If the Participant fails to provide the required Financial Security, the Participant shall be in default under this credit policy.

4) Litigation, Commitments, and Contingencies

Each Participant is also required to provide information as to any known Material litigation, commitments or contingencies as well as any prior bankruptcy declarations or Material defalcations by the Participant or its predecessors, subsidiaries or Affiliates, if any. These disclosures shall be made upon initiation or change or as requested by PJMSettlement.

5) Other Disclosures

Each Participant is required to disclose any Affiliates that are currently Members of PJM or are applying for membership within PJM. Each Participant is also required to disclose the existence of any ongoing investigations by the Securities and Exchange Commission (“SEC”), Federal Energy Regulatory Commission (“FERC”), or any other governing, regulatory, or standards body. These disclosures shall be made upon initiation or change, or as requested by PJMSettlement.

C. Corporate Guaranty

If a Corporate Guaranty is being utilized to establish credit for a Participant, the Guarantor will be evaluated and the Unsecured Credit Allowance or Financial Security requirement will be based on the financial strength of the Guarantor.

An irrevocable and unconditional Corporate Guaranty obtained from a third party (“Guarantor”) may be utilized as part of the credit evaluation process, but will not be considered a form of Financial Security. The Corporate Guaranty will be considered a transfer of credit from the Guarantor to the Participant. The Corporate Guaranty must guarantee the (i) full and prompt

payment of all amounts payable by the Participant under the Agreements, and (ii) performance by the Participant under this policy.

The Corporate Guaranty should clearly state the identities of the “Guarantor,” “Beneficiary” (PJMSettlement) and “Obligor” (Participant). The Corporate Guaranty must be signed by an officer of the Guarantor, and must demonstrate that it is duly authorized in a manner acceptable to PJMSettlement. Such demonstration may include either a Corporate Seal on the Guaranty itself, or an accompanying executed and sealed Secretary’s Certificate noting that the Guarantor was duly authorized to provide such Corporate Guaranty and that the person signing the Corporate Guaranty is duly authorized, or other manner acceptable to PJMSettlement.

A Participant supplying a Corporate Guaranty must provide the same information regarding the Guarantor as is required in the “Initial Credit Evaluation” §I.A. and the “Ongoing Evaluation” §I.B. of this policy, including providing the Rating Agency Reports, Financial Statements and Related Information, References, Litigation Commitments and Contingencies, and Other Disclosures. A Participant supplying a Foreign or Canadian Guaranty must also satisfy the requirements of §I.C.1 or §I.C.2, as appropriate.

If there is a Material change in the financial condition of the Guarantor or if the Corporate Guaranty comes within 30 days of expiring without renewal, the Participant will be required to provide Financial Security either in the form of a cash deposit or a letter of credit. Failure to provide the required Financial Security within two Business Days after request by PJMSettlement will constitute an event of default under this credit policy. A Participant may request PJMSettlement to perform a credit evaluation in order to determine creditworthiness and to establish an Unsecured Credit Allowance, if applicable. If PJMSettlement determines that a Participant does qualify for a sufficient Unsecured Credit Allowance, then Financial Security will not be required.

The PJMSettlement Credit Application contains an acceptable form of Corporate Guaranty that should be utilized by a Participant choosing to establish its credit with a Corporate Guaranty. If the Corporate Guaranty varies in any way from the PJMSettlement format, it must first be reviewed and approved by PJMSettlement. All costs associated with obtaining and maintaining a Corporate Guaranty and meeting the policy provisions are the responsibility of the Participant.

1) Foreign Guaranties

A Foreign Guaranty is a Corporate Guaranty that is provided by an Affiliate entity that is domiciled in a country other than the United States or Canada. The entity providing a Foreign Guaranty on behalf of a Participant is a Foreign Guarantor. A Participant may provide a Foreign Guaranty in satisfaction of part of its credit obligations or voluntary credit provision at PJMSettlement provided that all of the following conditions are met:

PJMSettlement reserves the right to deny, reject, or terminate acceptance of any Foreign Guaranty at any time, including for material adverse circumstances or occurrences.

a. A Foreign Guaranty:

Intra-PJM Tariffs

- i. Must contain provisions equivalent to those contained in PJMSettlement's standard form of Foreign Guaranty with any modifications subject to review and approval by PJMSettlement counsel.
- ii. Must be denominated in US currency.
- iii. Must be written and executed solely in English, including any duplicate originals.
- iv. Will not be accepted towards a Participant's Unsecured Credit Allowance for more than the following limits, depending on the Foreign Guarantor's credit rating:

Rating of Foreign Guarantor	Maximum Accepted Guaranty if Country Rating is AAA	Maximum Accepted Guaranty if Country Rating is AA+
A- and above	USD50,000,000	USD30,000,000
BBB+	USD30,000,000	USD20,000,000
BBB	USD10,000,000	USD10,000,000
BBB- or below	USD 0	USD 0

- v. May not exceed 50% of the Participant's total credit, if the Foreign Grantor is rated less than BBB+.
- b. A Foreign Guarantor:
- i. Must satisfy all provisions of the PJM credit policy applicable to domestic Guarantors.
 - ii. Must be an Affiliate of the Participant.
 - iii. Must maintain an agent for acceptance of service of process in the United States; such agent shall be situated in the Commonwealth of Pennsylvania, absent legal constraint.
 - iv. Must be rated by at least one Rating Agency acceptable to PJMSettlement; the credit strength of a Foreign Guarantor may not be determined based on an evaluation of its financials without an actual credit rating as well.
 - v. Must have a Senior Unsecured (or equivalent, in PJMSettlement's sole discretion) rating of BBB (one notch above BBB-) or greater by any and all agencies that provide rating coverage of the entity.
 - vi. Must provide financials in GAAP format or other format acceptable to PJMSettlement with clear representation of net worth, intangible assets, and any other information PJMSettlement may require in order to determine the entity's Unsecured Credit Allowance
 - vii. Must provide a Secretary's Certificate certifying the adoption of Corporate Resolutions:
 - 1. Authorizing and approving the Guaranty; and
 - 2. Authorizing the Officers to execute and deliver the Guaranty on behalf of the Guarantor.

- viii. Must be domiciled in a country with a minimum long-term sovereign (or equivalent) rating of AA+/Aa1, with the following conditions:
 - 1. Sovereign ratings must be available from at least two rating agencies acceptable to PJMSettlement (e.g. S&P, Moody's, Fitch, DBRS).
 - 2. Each agency's sovereign rating for the domicile will be considered to be the lowest of: country ceiling, senior unsecured government debt, long-term foreign currency sovereign rating, long-term local currency sovereign rating, or other equivalent measures, at PJMSettlement's sole discretion.
 - 3. Whether ratings are available from two or three agencies, the lowest of the two or three will be used.
- ix. Must be domiciled in a country that recognizes and enforces judgments of US courts.
- x. Must demonstrate financial commitment to activity in the United States as evidenced by one of the following:
 - 1. American Depositary Receipts (ADR) are traded on the New York Stock Exchange, American Stock Exchange, or NASDAQ.
 - 2. Equity ownership worth over USD100,000,000 in the wholly-owned or majority owned subsidiaries in the United States.
- xi. Must satisfy all other applicable provisions of the PJM Tariff and/or Operating Agreement, including this credit policy.
- xii. Must pay for all expenses incurred by PJMSettlement related to reviewing and accepting a foreign guaranty beyond nominal in-house credit and legal review.
- xiii. Must, at its own cost, provide PJMSettlement with independent legal opinion from an attorney/solicitor of PJMSettlement's choosing and licensed to practice law in the United States and/or Guarantor's domicile, in form and substance acceptable to PJMSettlement in its sole discretion, confirming the enforceability of the Foreign Guaranty, the Guarantor's legal authorization to grant the Guaranty, the conformance of the Guaranty, Guarantor, and Guarantor's domicile to all of these requirements, and such other matters as PJMSettlement may require in its sole discretion.

2) Canadian Guaranties

A Canadian Guaranty is a Corporate Guaranty that is provided by an Affiliate entity that is domiciled in Canada and satisfies all of the provisions below. The entity providing a Canadian Guaranty on behalf of a Participant is a Canadian Guarantor. A Participant may provide a Canadian Guaranty in satisfaction of part of its credit obligations or voluntary credit provision at PJMSettlement provided that all of the following conditions are met.

PJMSettlement reserves the right to deny, reject, or terminate acceptance of any Canadian Guaranty at any time for reasonable cause, including adverse material circumstances.

- a. A Canadian Guaranty:

- i. Must contain provisions equivalent to those contained in PJMSettlement's standard form of Foreign Guaranty with any modifications subject to review and approval by PJMSettlement counsel.
 - ii. Must be denominated in US currency.
 - iii. Must be written and executed solely in English, including any duplicate originals.
- b. A Canadian Guarantor:
 - i. Must satisfy all provisions of the PJM credit policy applicable to domestic Guarantors.
 - ii. Must be an Affiliate of the Participant.
 - iii. Must maintain an agent for acceptance of service of process in the United States; such agent shall be situated in the Commonwealth of Pennsylvania, absent legal constraint.
 - iv. Must be rated by at least one Rating Agency acceptable to PJMSettlement; the credit strength of a Canadian Guarantor may not be determined based on an evaluation of its financials without an actual credit rating as well.
 - v. Must provide financials in GAAP format or other format acceptable to PJMSettlement with clear representation of net worth, intangible assets, and any other information PJMSettlement may require in order to determine the entity's Unsecured Credit Allowance.
 - vi. Must satisfy all other applicable provisions of the PJM Tariff and/or Operating Agreement, including this credit policy.

II. CREDIT ALLOWANCE AND WORKING CREDIT LIMIT

PJMSettlement's credit evaluation process will include calculating a Credit Score for each Participant. The credit score will be utilized to determine a Participant's Unsecured Credit Allowance.

Participants who do not qualify for an Unsecured Credit Allowance will be required to provide Financial Security based on their Peak Market Activity, as provided below.

A corresponding Working Credit Limit will be established based on the Unsecured Credit Allowance and/or the Financial Security provided.

Where Participant of PJM are considered Affiliates, Unsecured Credit Allowances and Working Credit Limits will be established for each individual Participant, subject to an aggregate maximum amount for all Affiliates as provided for in §II.F of this policy.

In the credit evaluation of Cooperatives and Municipalities, PJMSettlement may request additional information as part of the overall financial review process and will consider other alternative measures in determining financial strength and creditworthiness. For Cooperatives and Municipalities, PJMSettlement will consider qualitative factors such as the following in its credit evaluation: taxing authority, independent ratemaking authority, financial strength of

members that have contractual commitments to pay a cooperative's expenses, and other measures of size besides Tangible Net Worth.

A. Credit Score

For participants with credit ratings, a Credit Score will be assigned based on their senior unsecured credit rating and credit watch status as shown in the table below. If an explicit senior unsecured rating is not available, PJMSettlement may impute an equivalent rating from other ratings that are available. For Participants without a credit rating, but who wish to be considered for unsecured Credit, a Credit Score will be generated from PJMSettlement's review and analysis of various factors that are predictors of financial strength and creditworthiness. Key factors in the scoring process include, financial ratios, and years in business. PJMSettlement will consistently apply the measures it uses in determining Credit Scores. The credit scoring methodology details are included in a supplementary document available on OASIS.

Rated Entities Credit Scores

Rating	Score	Score Modifier	
		Credit Watch Negative	Credit Watch Positive
AAA	100	-1.0	0.0
AA+	99	-1.0	0.0
AA	99	-1.0	0.0
AA-	98	-1.0	0.0
A+	97	-1.0	0.0
A	96	-2.0	0.0
A-	93	-3.0	1.0
BBB+	88	-4.0	2.0
BBB	78	-4.0	2.0
BBB-	65	-4.0	2.0
BB+ and below	0	0.0	0.0

B. Unsecured Credit Allowance

PJMSettlement will determine a Participant's Unsecured Credit Allowance based on its Credit Score and the parameters in the table below. The maximum Unsecured Credit Allowance is the lower of:

- 1) A percentage of the Participant's Tangible Net Worth, as stated in the table below, with the percentage based on the Participant's credit score; and
- 2) A dollar cap based on the credit score, as stated in the table below:

Credit Score	Tangible Net Worth Factor	Maximum Unsecured Credit Allowance (\$ Million)
91-100	2.125 – 2.50%	\$50
81-90	1.708 – 2.083%	\$42
71-80	1.292 – 1.667%	\$33
61-70	0.875 – 1.25%	\$7
51-60	0.458 – 0.833%	\$0-\$2
50 and Under	0%	\$0

If a Corporate Guaranty is utilized to establish an Unsecured Credit Allowance for a Participant, the value of a Corporate Guaranty will be the lesser of:

- The limit imposed in the Corporate Guaranty;
- The Unsecured Credit Allowance calculated for the Guarantor; and
- A portion of the Unsecured Credit Allowance calculated for the Guarantor in the case of Affiliated Participants.

PJMSettlement has the right at any time to modify any Unsecured Credit Allowance and/or require additional Financial Security as may be deemed reasonably necessary to support current market activity. Failure to pay the required amount of additional Financial Security within two Business Days shall be an event of default.

PJMSettlement will maintain a posting of each Participant's unsecured Credit Allowance, along with certain other credit related parameters, on the PJM web site in a secure, password-protected location. Such information will be updated at least weekly. Each Participant will be responsible for monitoring such information and recognizing small changes that may occur. However, in case of a reduction in Unsecured Credit Allowance of greater than 25% within a 30-day period, PJMSettlement will notify the Participant. PJMSettlement's responsibility to notify the Participant will be satisfied if it sends an email notification to either a primary or secondary Members Committee Representative for the Participant. It is the Participant's responsibility to ensure that such a representative exists, and that contact information is correct.

C. Seller Credit

Participants that have maintained a Net Sell Position for each of the prior 12 months are eligible for Seller Credit, which is an additional form of Unsecured Credit. A Participant's Seller Credit will be equal to sixty percent of the Participant's thirteenth smallest weekly Net Sell Position invoiced in the past 52 weeks.

Each Participant receiving Seller Credit must maintain both its Seller Credit and its Total Net Sell Position equal to or greater than the Participant's aggregate credit requirements, less any Financial Security or other sources of credit provided.

For every participant receiving Seller Credit, PJMSettlement will maintain a forecast of the Participant's Total Net Sell Position considering the Participant's current Total Net Sell Position, recent trends in the Participant's Total Net Sell Position, and other information available to PJMSettlement, such as, but not limited to, known generator outages, changes in load responsibility, and bilateral transactions impacting the Participant. If PJMSettlement's forecast ever indicates that the Participant's Total Net Sell Position may in the future be less than the Participant's aggregate credit requirements, less any Financial Security or other sources of credit provided, then PJMSettlement may require Financial Security as needed to cover the difference. Failure to pay the required amount of additional Financial Security within two Business Days shall be an event of default.

Any Financial Security required by PJMSettlement pursuant to these provisions for Seller Credit will be returned once the requirement for such Financial Security has ended. Seller Credit may not be conveyed to another entity through use of a guaranty.

D. Peak Market Activity and Financial Security Requirement

A PJM Participant or Applicant that has an insufficient Unsecured Credit Allowance to satisfy its Peak Market Activity will be required to provide Financial Security such that its Unsecured Credit Allowance and Financial Security together are equal to its Peak Market Activity in order to secure its transactional activity in the PJM Market.

Peak Market Activity for Participants will be determined semi-annually beginning in the first complete billing week in the months of April and October. Peak Market Activity shall be the greater of the initial Peak Market Activity, as explained below, or the greatest amount invoiced for the Participant's transaction activity for all PJM markets and services, excluding FTR Net Activity, in any rolling one, two, or three week period, ending within a respective semi-annual period.

The initial Peak Market Activity for Applicants will be determined by PJM based on a review of an estimate of their transactional activity for all PJM markets and services, excluding FTR Net Activity, over the next 52 weeks, which the Applicant shall provide to PJM.

The initial Peak Market Activity for Participants, calculated at the beginning of each respective semi-annual period, shall be the average of all non-zero invoice totals, excluding FTR Net Activity, over the previous 52 weeks. This calculation shall be performed and applied within three business days following the day the invoice is issued for the first full billing week in the current semi-annual period.

Prepayments shall not affect Peak Market Activity unless otherwise agreed to in writing pursuant to this Credit Policy.

All Peak Market Activity calculations shall take into account reductions of invoice values effectuated by early payments which are applied to reduce a Participant's Peak Market Activity as contemplated by other terms of the Credit Policy; provided that the initial Peak Market Activity shall not be less than the average value calculated using the weeks for which no early payment was made.

A Participant may reduce its Financial Security Requirement by agreeing in writing (in a form acceptable to PJMSettlement) to make additional payments, including prepayments, as and when necessary to ensure that such Participant's Total Net Obligation at no time exceeds such reduced Financial Security Requirement.

PJMSettlement may, at its discretion, adjust a Participant's Financial Security Requirement if PJMSettlement determines that the Peak Market Activity is not representative of such Participant's expected activity, as a consequence of known, measurable, and sustained changes. Such changes may include the loss (without replacement) of short-term load contracts, when such contracts had terms of three months or more and were acquired through state-sponsored retail load programs, but shall not include short-term buying and selling or virtual bidding.

PJMSettlement may waive the Financial Security Requirement for a Participant that agrees in writing that it shall not, after the date of such agreement, incur obligations under any of the Agreements. Such entity's access to all electronic transaction systems administered by PJM shall be terminated.

PJMSettlement will maintain a posting of each Participant's Financial Security Requirement on the PJM web site in a secure, password-protected location. Such information will be updated at least weekly. Each Participant will be responsible for monitoring such information and recognizing changes that may occur. However, in case of an increase in the Financial Security Requirement of greater than 25% within a 30-day period, PJMSettlement will notify the Participant. PJMSettlement's responsibility to notify the Participant will be satisfied if it sends an email notification to either a primary or secondary Members Committee Representative for the Participant. It is the Participant's responsibility to ensure that such a representative exists, and that contact information is correct. This notification does not restrict or in any way affect PJMSettlement's authority to require Financial Security under other provisions of the credit policy.

E. Working Credit Limit

PJMSettlement will establish a Working Credit Limit for each Participant against which its **Total Net Obligation** will be monitored. The Working Credit Limit is defined as 75% of the Financial Security provided to PJMSettlement and/or 75% of the Unsecured Credit Allowance determined by PJMSettlement based on a credit evaluation. A Participant's Total Net Obligation should not exceed its Working Credit Limit.

F. Credit Limit Setting For Affiliates

If two or more Participants are Affiliates and each is being granted an Unsecured Credit Allowance and a corresponding Working Credit Limit, PJMSettlement will consider the overall creditworthiness of the Affiliated Participants when determining the Unsecured Credit Allowances and Working Credit Limits in order not to grant more Unsecured Credit than the overall corporation could support.

Example: Participants A and B each have a \$10.0 million Corporate Guaranty from their common parent, a holding company with an Unsecured Credit Allowance calculation of \$12.0 million. PJMSettlement may limit the Unsecured Credit Allowance for each Participant to \$6.0 million, so the total Unsecured Credit Allowance does not exceed the corporate total of \$12.0 million.

PJMSettlement will work with Affiliated Participants to allocate the total Unsecured Credit Allowance among the Affiliates while assuring that no individual Participant, nor common guarantor, exceeds the Unsecured Credit Allowance appropriate for its credit strength. The aggregate Unsecured Credit Allowance for a group of Affiliates shall not exceed \$150 million. A group of Affiliates subject to this cap shall request PJMSettlement to allocate the maximum Unsecured Credit Allowance and Working Credit Limit amongst the group, assuring that no

individual Participant, nor common guarantor, shall exceed the Unsecured Credit Allowance appropriate for its credit strength.

G. Working Credit Limit Violations

1) Notification

A Participant is subject to notification when its Total Net Obligation to PJMSettlement approaches the Participant's established Working Credit Limit.

2) Suspension

A Participant that exceeds its Working Credit Limit is subject to suspension from participation in the PJM markets and from scheduling any future Transmission Service unless and until Participant's credit standing is brought within acceptable limits. A Participant will have two Business Days from notification to remedy the situation in a manner deemed acceptable by PJMSettlement. Additionally, PJMSettlement, in coordination with PJM, will take such actions as may be required or permitted under the Agreements, including but not limited to the termination of the Participant's ongoing Transmission Service and participation in PJM Markets. Failure to comply with this policy will be considered an event of default under this credit policy.

H. PJM Administrative Charges

Financial Security held by PJMSettlement shall also secure obligations to PJM for PJM administrative charges.

I. Pre-existing Financial Security

PJMSettlement's credit requirements are applicable as of the effective date of the filing on May 5, 2010 by PJM and PJMSettlement of amendments to Attachment Q. Financial Security held by PJM prior to the effective date of such amendments shall be held by PJM for the benefit of PJMSettlement.

III. VIRTUAL BID SCREENING

A. Credit and Financial Security

PJMSettlement does not require a Participant to establish separate or additional credit for virtual bidding. A Participant's ability to submit virtual bids into the spot market will be governed, however, by the terms of this section, so a Participant may choose to establish such additional credit in order to expand its ability to undertake virtual bidding in the PJM spot market.

If a Participant chooses to provide additional Financial Security in order to increase its **Credit Available for Virtual Bidding** PJMSettlement may establish a reasonable timeframe, not to exceed three months, for which such Financial Security must be maintained. PJMSettlement will not impose such restriction on a deposit unless a Participant is notified prior to making the

deposit. Such restriction, if applied, shall be applied to all future deposits by all virtual bidding participants.

A Participant wishing to increase its Credit Available for Virtual Bidding by providing additional Financial Security may make the appropriate arrangements with PJMSettlement. PJMSettlement, will make a good faith effort to make new Financial Security available as Credit Available for Virtual Bidding as soon as practicable after confirmation of receipt. In any event, however, Financial Security received and confirmed by noon on a business day will be applied (as provided under this policy) to Credit Available for Virtual Bidding no later than 10:00 am on the following business day. Receipt and acceptance of wired funds for cash deposit shall mean actual receipt by PJMSettlement's bank, deposit into PJMSettlement's customer deposit account, and confirmation by PJMSettlement that such wire has been received and deposited. Receipt and acceptance of letters of credit shall mean receipt of the original letter of credit or amendment thereto, and confirmation from PJMSettlement's credit and legal staffs that such letter of credit or amendment thereto conforms to PJMSettlement's requirements, which confirmation shall be made in a reasonable and practicable timeframe. To facilitate this process, bidders wiring funds for the purpose of increasing their Credit Available for Virtual Bidding are advised to specifically notify PJMSettlement that a wire is being sent for such purpose.

B. Market Activity Review

Each month, PJMSettlement will update the **Nodal Reference Price** for each node and each aggregated price point based on a rank ordering of historical price differentials. The Nodal Reference Price at each location will be the 97th percentile price differential between hourly Day-ahead and Real-time prices experienced over the corresponding two-month reference period in the prior calendar year. In order to capture seasonality effects and maintain a two-month reference period, reference months will be grouped by two, starting with January (e.g., Jan-Feb, Mar-Apr, ... , Jul-Aug, ... 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.

On a daily basis, PJMSettlement will perform an analysis for each market participant to determine if **Virtual Bid Screening** is required for bidding in the Day-ahead market. This analysis will be performed as follows:

1. For each participant account, PJMSettlement will calculate an **Uncleared Bid Exposure**. $\text{Uncleared Bid Exposure} = \text{sum of (not-cleared bids and offers} \times \text{the Nodal Reference Price)}$ summed over all nodes for the prior two days of actual bids. If a participant submits uncleared bids and uncleared offers at the same node or aggregated price point, only the higher of the two megawatt quantities (i.e., either the sum of all of the participant's bids at such node or the sum of all of the participant's offers at such node) shall be considered for purposes of this calculation.

2. If the Uncleared Bid Exposure exceeds the Participant's Unsecured Credit and/or Financial Security, less any credit required for FTR or other credit requirement determinants as defined in this policy, then Virtual Bid Screening will be required.

3. PJMSettlement will initially look at historical activity beginning May 1, 2003 to determine which participants will require Virtual Bid Screening upon implementation of this procedure.

C. Virtual Bid Screening Process

If it is determined that Virtual Bid Screening is required for a market participant, the screening process will be conducted in the PJM eMKT web interface. The process will automatically reject all virtual bids and offers submitted by the PJM market participant if the participant's Credit Available for Virtual Bidding is exceeded by the **Virtual Credit Exposure** that is calculated based on the participant's submitted bids and offers as described below.

A Participant's Virtual Credit Exposure will be calculated on a daily basis for all virtual bids submitted by the market participant for the next operating day using the following equation:

Virtual Credit Exposure = the lesser of:

(i) ((total MWh bid or offered, whichever is greater, hourly at each node) x Nodal Reference Price x 2 days) summed over all nodes and all hours; or

(ii) (a) ((the total MWh bid or offered, whichever is greater, hourly at each node) x the Nodal Reference Price x 1 day) summed over all nodes and all hours; plus (b) ((the difference between the total bid MWh cleared and total offered MWh cleared hourly at each node) x Nodal Reference Price) summed over all nodes and all hours for the previous three cleared day-ahead markets.

A Participant's Credit Available for Virtual Bidding will be the Participant's Working Credit Limit less any unpaid billed and unbilled amounts owed to PJMSettlement, plus any current period unbilled amounts owed by PJMSettlement to the Participant, less any credit required for FTR or other credit requirement determinants as defined in this policy.

Each PJM Market Participant that is identified as requiring Virtual Bid Screening based on bidding history will be screened in the following manner: If the participant's Virtual Credit Exposure exceeds its Credit Available for Virtual Bidding, the Market Participant will be notified via an eMKT error message, and the submitted bids will be rejected. Upon such notification, the Market Participant may alter its virtual bids and offers so that its Virtual Credit Exposure does not exceed its Credit Available for Virtual Bidding, and may resubmit them. Bids may be submitted in one or more groups during a day. If one or more groups of bids is submitted and accepted, and a subsequent group of submitted bids causes the total submitted bids to exceed the Virtual Credit Exposure, then only that subsequent set of bids will be rejected. Previously accepted bids will not be affected, though the Market Participant may choose to withdraw them voluntarily.

IV. RELIABILITY PRICING MODEL AUCTION CREDIT REQUIREMENTS

Settlement during any Delivery Year of cleared positions resulting or expected to result from any Reliability Pricing Model Auction shall be included as appropriate in Peak Market Activity, and the provisions of this Attachment Q shall apply to any such activity and obligations arising therefrom. In addition, the provisions of this section shall apply to any entity seeking to participate in any RPM Auction, to address credit risks unique to such auctions.

A. Applicability

A Market Seller seeking to submit a Sell Offer in any Reliability Pricing Model Auction based on any Capacity Resource for which there is a materially increased risk of non-performance must satisfy the credit requirement specified in section IV.B before submitting such Sell Offer. Credit must be maintained until such risk of non-performance is substantially eliminated, but may be reduced commensurate with the reduction in such risk, as set forth in Section IV.C.

For purposes of this provision, a resource for which there is a materially increased risk of non-performance shall mean: (i) a Planned Generation Capacity Resource; (ii) a Planned Demand Resource or an Energy Efficiency Resource; (iii) a Qualifying Transmission Upgrade; or (iv) an existing or Planned Generation Capacity Resource located outside the PJM Region that at the time it is submitted in a Sell Offer has not secured firm transmission service to the border of the PJM Region sufficient to satisfy the deliverability requirements of the Reliability Assurance Agreement.

B. Reliability Pricing Model Auction Credit Requirement

For any resource specified in Section IV.A, the credit requirement shall be the RPM Auction Credit Rate, as provided in Section IV.D, times the megawatts to be offered for sale from such resource in a Reliability Pricing Model Auction. As set forth in Section IV.D, the Auction Credit Requirement shall be determined separately for each Delivery Year. The RPM Auction Credit Requirement for each Market Seller shall be the sum of the credit requirements for all such resources to be offered by such Market Seller in the auction.

C. Reduction in Credit Requirement

The RPM Auction Credit Requirement for a Market Seller will be reduced for any Delivery Year to the extent less than all of such Market Seller's offers clear in the Base Residual Auction or any Incremental Auction for such Delivery Year. Such reduction shall be proportional to the quantity, in megawatts, that failed to clear in such Delivery Year. As specified in Section IV.D, the RPM Auction Credit Rate also may be reduced under certain circumstances after the auction has closed.

In addition, the RPM Auction Credit Requirement for a Participant for any given Delivery Year shall be reduced periodically, provided the Participant successfully meets progress milestones that reduce the risk of non-performance, as follows:

- a. For Planned Demand Resources and Energy Efficiency Resources, the RPM Auction Credit Requirement will be reduced in direct proportion to the megawatts of such Demand Resource or ILR that the Resource Provider qualifies as a Capacity Resource, in accordance with the procedures established under the Reliability Assurance Agreement.
- b. For existing Generation Capacity Resources located outside the PJM Region that have not secured sufficient firm transmission to the border of the PJM Region prior to the auction in which such resource is first offered, the RPM Credit Requirement shall be reduced in direct proportion to the megawatts of firm transmission service secured by the Market Seller that qualify such resource under the deliverability requirements of the Reliability Assurance Agreement.
- c. For Planned Generation Capacity Resources, the RPM Credit Requirement shall be reduced to 50% of the amount calculated under Section IV.B beginning as of the effective date of an Interconnection Service Agreement, and shall be reduced to zero on the date of commencement of Interconnection Service.
- d. For Planned Generation Capacity Resources located outside the PJM Region, the RPM Credit Requirement shall be reduced once the conditions in both b and c above are met, i.e., the RPM Credit Requirement shall be reduced to 50% of the amount calculated under Section IV.B when 1) beginning as of the effective date of the equivalent Interconnection Service Agreement, and 2) when 50% or more megawatts of firm transmission service have been secured by the Market Seller that qualify such resource under the deliverability requirements of the Reliability Assurance Agreement. The RPM Credit Requirement for a Planned Generation Capacity Resource located outside the PJM Region shall be reduced to zero when 1) the resource commences Interconnection Service and 2) 100% of the megawatts of firm transmission service have been secured by the Market Seller that qualify such resource under the deliverability requirements of the Reliability Assurance Agreement.
- e. For Qualifying Transmission Upgrades, the RPM Credit Requirement shall be reduced to 50% of the amount calculated under Section IV.B beginning as of the effective date of the latest associated Interconnection Service Agreement (or, when a project will have no such agreement, an Upgrade Construction Service Agreement), and shall be reduced to zero on the date the Qualifying Transmission Upgrade is placed in service. In addition, a Qualifying Transmission Upgrade will be allowed a reduction in its RPM Credit Requirement equal to the amount of collateral currently posted with PJM for the facility construction when the Qualifying Transmission Upgrade meets the following requirements: the Upgrade Construction Service Agreement has been fully executed, the full estimated cost to complete as most recently determined or updated by PJM has been fully paid or collateralized, and all regulatory and other required approvals (except those that must await construction completion) have been obtained. Such reduction in RPM Credit Requirement may not be transferred across different projects.

D. RPM Auction Credit Rate

As set forth in the PJM Manuals, a separate Auction Credit Rate shall be calculated for each Delivery year prior to each Reliability Pricing Model Auction for such Delivery Year, as follows:

For Delivery Years through the Delivery Year that ends on May 31, 2012, the Auction Credit Rate for any resource for a Delivery Year shall be (the greater of \$20/MW-day or 0.24 times the Capacity Resource Clearing Price in the Base Residual Auction for such Delivery Year for the Locational Deliverability Area within which the resource is located) times the number of days in such Delivery Year.

For Delivery Years beginning with the Delivery Year that commences on June 1, 2012:

a. Prior to the posting of the results of a Base Residual Auction for a Delivery Year, the Auction Credit Rate shall be (the greater of (i) 0.3 times the Net Cost of New Entry for the PJM Region for such Delivery Year, in MW-day or (ii) \$20 per MW-day) times the number of days in such Delivery Year.

b. Subsequent to the posting of the results from a Base Residual Auction, the Auction Credit Rate used for ongoing credit requirements for supply committed in such auction shall be (the greater of \$20/MW-day or 0.2 times the Capacity Resource Clearing Price in such auction for the Locational Deliverability Area within which the resource is located) times the number of days in such Delivery Year; provided, however, that the Auction Credit Rate for Capacity Resources to the extent committed in the Base Residual Auction for the 2012-2013 Delivery Year shall be as determined under the provisions of this Attachment Q in effect at the time of such Base Residual Auction.

c. For any resource not previously committed for a Delivery Year that seeks to participate in an Incremental Auction, the Auction Credit Rate shall be (the greater of (i) 0.3 times the Net Cost of New Entry for the PJM Region for such Delivery Year, in MW-day or (ii) 0.24 times the Capacity Resource Clearing Price in the Base Residual Auction for such Delivery Year for the Locational Deliverability Area within which the resource is located or (iii) \$20 per MW-day) times the number of days in such Delivery Year.

d. Subsequent to the posting of the results of an Incremental Auction, the Auction Credit Rate used for ongoing credit requirements for supply committed in such auction shall be (the greater of \$20/MW-day or 0.2 times the Capacity Resource Clearing Price in such auction for the Locational Deliverability Area within which the resource is located, but no greater than the Auction Credit Rate previously established for such resource's participation in such Incremental Auction pursuant to subsection (c) above) times the number of days in such Delivery Year.

E. Additional Form of Unsecured Credit for RPM

In addition to the forms of credit specified elsewhere in this Attachment Q, the following form of Unsecured Credit shall be available to Market Sellers, but solely for purposes of satisfying RPM Auction Credit Requirements. If a supplier has a history of being a net seller into PJM markets, on average, over the past 12 months, then PJMSettlement will count as available Unsecured

Credit twice the average of that participant's total net monthly PJMSettlement bills over the past 12 months.

F. Credit Responsibility for Traded Planned RPM Capacity Resources

PJMSettlement may require that credit and financial responsibility for planned RPM Capacity Resources that are traded remain with the original party (which for these purposes, means the party bearing credit responsibility for the planned RPM Capacity Resource immediately prior to trade) unless the receiving party independently establishes consistent with the PJM credit policy, that it has sufficient credit with PJMSettlement and agrees by providing written notice to PJMSettlement that it will fully assume the credit responsibility associated with the traded planned RPM Capacity Resource.

V. FINANCIAL TRANSMISSION RIGHT AUCTIONS

A. FTR Credit Limit.

PJMSettlement will establish an FTR Credit Limit for each Participant. Participants must maintain their FTR Credit Limit at a level equal to or greater than their FTR Credit Requirement. FTR Credit Limits will be established only by a Participant providing Financial Security or qualifying for Seller Credit as provided for in §II.C of this policy.

B. FTR Credit Requirement.

For each Participant with FTR activity, PJMSettlement shall calculate an FTR Credit Requirement based on FTR cost less a discounted historical value. FTR Credit Requirements shall be further adjusted by ARR credits available and by an amount based on portfolio diversification, if applicable. The requirement will be based on individual monthly exposures which are then used to derive a total requirement.

The FTR Credit Requirement shall be calculated by first adding for each month the FTR Monthly Credit Requirement Contribution for each submitted, accepted, and cleared FTR and then subtracting the prorated value of any ARRs held by the Participant for that month. The resulting twelve monthly subtotals represent the expected value of net payments between PJMSettlement and the Participant for FTR activity each month during the Planning Period. Subject to later adjustment by an amount based on portfolio diversification, if applicable, the FTR Credit Requirement shall be the sum of the individual positive monthly subtotals, representing months in which net payments to PJMSettlement are expected.

C. Rejection of FTR Bids.

Bids submitted into an auction will be rejected if the Participant's FTR Credit Requirement including such submitted bids would exceed the Participant's FTR Credit Limit, or if the

Participant fails to establish additional credit as required pursuant to provisions related to portfolio diversification.

D. FTR Credit Collateral Returns.

A Market Participant may request from PJMSettlement the return of any collateral no longer required for the FTR auctions. PJMSettlement is permitted to limit the frequency of such requested collateral returns, provided that collateral returns shall be made by PJMSettlement at least once per calendar quarter, if requested by a Market Participant.

E. Effective Period for Credit for Multi-Month FTR Auction Products.

Credit for all FTR auction products must remain in effect for the entire duration of the FTR auction product. If a Corporate Guaranty or Financial Security provided for FTR credit has a termination date, such termination date must be at least 10 days after the date upon which payment is due for the last month of the FTR auction product.

F. Credit Responsibility for Traded FTRs.

PJMSettlement may require that credit responsibility associated with an FTR traded within PJM's eFTR system remain with the original party (which for these purposes, means the party bearing credit responsibility for the FTR immediately prior to trade) unless and until the receiving party independently establishes, consistent with the PJM credit policy, sufficient credit with PJMSettlement and agrees through confirmation of the FTR trade within the eFTR system that it will meet in full the credit requirements associated with the traded FTR.

G. Portfolio Diversification.

Subsequent to calculating a tentative cleared solution for an FTR auction (or auction round), PJM shall both:

1. Determine the FTR Portfolio Auction Value, including the tentative cleared solution. Any Participants with such FTR Portfolio Auction Values that are negative shall be deemed FTR Flow Undiversified.
2. Measure the geographic concentration of the FTR Flow Undiversified portfolios by testing such portfolios using a simulation model including, one at a time, each planned transmission outage or other network change which would substantially affect the network for the specific auction period. A list of such planned outages or changes anticipated to be modeled shall be posted prior to commencement of the auction (or auction round). Any FTR Flow Undiversified portfolio that experiences a net reduction in calculated congestion credits as a result of any one or more of such modeled outages or changes shall be deemed FTR Geographically Undiversified.

For portfolios that are FTR Flow Undiversified but not FTR Geographically Undiversified, PJMSettlement shall increment the FTR Credit Requirement by an amount equal to twice the

absolute value of the FTR Portfolio Auction Value, including the tentative cleared solution. For Participants with portfolios that are both FTR Flow Undiversified and FTR Geographically Undiversified, PJMSettlement shall increment the FTR Credit Requirement by an amount equal to three times the absolute value of the FTR Portfolio Auction Value, including the tentative cleared solution. For portfolios that are FTR Flow Undiversified in months subsequent to the current planning year, these incremental amounts, calculated on a monthly basis, shall be reduced (but not below zero) by an amount up to 25% of the monthly value of ARR credits that are held by a Participant. Subsequent to the ARR allocation process preceding an annual FTR auction, such ARRs credits shall be reduced to zero for months associated with that ARR allocation process. PJMSettlement may recalculate such ARR credits at any time, but at a minimum shall do so subsequent to each annual FTR auction. If a reduction in such ARR credits at any time increases the amount of credit required for the Participant beyond its credit available for FTR activity, the Participant must increase its credit to eliminate the shortfall.

If the FTR Credit Requirement for any Participant exceeds its credit available for FTRs as a result of these diversification requirements for the tentatively cleared portfolio of FTRs, PJMSettlement shall immediately issue a demand for additional credit, and such demand must be fulfilled before 4:00 p.m. on the business day following the demand. If any Participant does not timely satisfy such demand, PJMSettlement, in coordination with PJM, shall cause the removal that Participant's entire set of bids for that FTR auction (or auction round) and a new cleared solution shall be calculated for the entire auction (or auction round).

If necessary, PJM shall repeat the auction clearing calculation. PJM shall repeat these portfolio diversification calculations subsequent to any such secondary clearing calculation, and PJMSettlement shall require affected Participants to establish additional credit.

H. FTR Administrative Charge Credit Requirement

In addition to any other credit requirements, PJMSettlement may apply a credit requirement to cover the maximum administrative fees that may be charged to a Participant for its bids and offers.

I. Long-Term FTR Credit Recalculation

Long-term FTR Credit Requirement calculations shall be updated annually for known history, consistent with updating of historical values used for FTR Credit Requirement calculations in the annual auctions.

VI. FORMS OF FINANCIAL SECURITY

Participants that provide Financial Security must provide the security in a PJMSettlement approved form and amount according to the guidelines below.

Financial Security which is no longer required to be maintained under provisions of the Agreements shall be returned at the request of a participant no later than two Business Days following determination by PJMSettlement within a commercially reasonable period of time that such collateral is not required.

Except when an event of default has occurred, a Participant may substitute an approved PJMSettlement form of Financial Security for another PJMSettlement approved form of Financial Security of equal value. The Participant must provide three (3) Business Days notice to PJMSettlement of its intent to substitute the Financial Security. PJMSettlement will release the replaced Financial Security with interest, if applicable, within (3) Business Days of receiving an approved form of substitute Financial Security.

A. Cash Deposit

Cash provided by a Participant as Financial Security will be held in a depository account by PJMSettlement with interest earned at PJMSettlement's overnight bank rate, and accrued to the Participant. Interest shall be paid to the Participant upon written request, but not more often than quarterly. PJMSettlement also may establish an array of investment options among which a Participant may choose to invest its cash deposited as Financial Security. Such investment options shall be comprised of high quality debt instruments, as determined by PJMSettlement, and may include obligations issued by the federal government and/or federal government sponsored enterprises. These investment options will reside in accounts held in PJMSettlement's name in a banking or financial institution acceptable to PJMSettlement. Where practicable, PJMSettlement may establish a means for the Participant to communicate directly with the bank or financial institution to permit the Participant to direct certain activity in the PJMSettlement account in which its Financial Security is held. PJMSettlement will establish and publish procedural rules, identifying the investment options and respective discounts in collateral value that will be taken to reflect any liquidation, market and/or credit risk presented by such investments. PJMSettlement has the right to liquidate all or a portion of the account balances at its discretion to satisfy a Participant's Total Net Obligation to PJMSettlement in the event of default under this credit policy or one or more of the Agreements.

B. Letter Of Credit

An unconditional, irrevocable standby letter of credit can be utilized to meet the Financial Security requirement. As stated below, the form, substance, and provider of the letter of credit must all be acceptable to PJMSettlement.

- The letter of credit will only be accepted from U.S.-based financial institutions or U.S. branches of foreign financial institutions ("financial institutions") that have a minimum corporate debt rating of "A" by Standard & Poor's or Fitch Ratings, or "A2" from Moody's Investors Service, or an equivalent short term rating from one of these agencies. PJMSettlement will consider the lowest applicable rating to be the rating of the financial institution. If the rating of a financial institution providing a letter of credit is lowered below A/A2 by any rating agency, then PJMSettlement may require the Participant to provide a letter of credit from another financial institution that is rated A/A2 or better, or

to provide a cash deposit. If a letter of credit is provided from a U.S. branch of a foreign institution, the U.S. branch must itself comply with the terms of this credit policy, including having its own acceptable credit rating.

- The letter of credit shall state that it shall renew automatically for successive one-year periods, until terminated upon at least ninety (90) days prior written notice from the issuing financial institution. If PJM or PJMSettlement receives notice from the issuing financial institution that the current letter of credit is being cancelled, the Participant will be required to provide evidence, acceptable to PJMSettlement, that such letter of credit will be replaced with appropriate Financial Security, effective as of the cancellation date of the letter of credit, no later than thirty (30) days before the cancellation date of the letter of credit. Failure to do so will constitute a default under this credit policy and one of more of the Agreements.
- The letter of credit must clearly state the full names of the "Issuer", "Account Party" and "Beneficiary" (PJMSettlement), the dollar amount available for drawings, and shall specify that funds will be disbursed upon presentation of the drawing certificate in accordance with the instructions stated in the letter of credit. The letter of credit should specify any statement that is required to be on the drawing certificate, and any other terms and conditions that apply to such drawings.
- The PJMSettlement Credit Application contains an acceptable form of a letter of credit that should be utilized by a Participant choosing to meet its Financial Security requirement with a letter of credit. If the letter of credit varies in any way from the PJMSettlement format, it must first be reviewed and approved by PJMSettlement. All costs associated with obtaining and maintaining a letter of credit and meeting the policy provisions are the responsibility of the Participant
- PJMSettlement may accept a letter of credit from a Financial Institution that does not meet the credit standards of this policy provided that the letter of credit has third-party support, in a form acceptable to PJMSettlement, from a financial institution that does meet the credit standards of this policy.

VII. POLICY BREACH AND EVENTS OF DEFAULT

A Participant will have two Business Days from notification of Breach (including late payment notice) or notification of a Collateral Call to remedy the Breach or satisfy the Collateral Call in a manner deemed acceptable by PJMSettlement. Failure to remedy the Breach or satisfy such Collateral Call within such two Business Days will be considered an event of default. If a Participant fails to meet the requirements of this policy but then remedies the Breach or satisfies a Collateral Call within the two Business Day cure period, then the Participant shall be deemed to have complied with the policy. Any such two Business Day cure period will expire at 4:00 p.m. eastern prevailing time on the final day.

Only one cure period shall apply to a single event giving rise to a breach or default. Application of Financial Security towards a non-payment Breach shall not be considered a satisfactory cure of the Breach if the Participant fails to meet all requirements of this policy after such application.

Failure to comply with this policy (except for the responsibility of a Participant to notify PJMSettlement of a Material change) shall be considered an event of default. Pursuant to § 15.1.3(a) of the Operating Agreement of PJM Interconnection, L.L.C. and § I.7.3 of the PJM Open Access Transmission Tariff, non-compliance with the PJMSettlement credit policy is an event of default under those respective Agreements. In event of default under this credit policy or one or more of the Agreements, PJMSettlement, in coordination with PJM, will take such actions as may be required or permitted under the Agreements, including but not limited to the termination of the Participant's ongoing Transmission Service and participation in PJM Markets. PJMSettlement has the right to liquidate all or a portion of a Participant's Financial Security at its discretion to satisfy Total Net Obligations to PJMSettlement in the event of default under this credit policy or one or more of the Agreements.

PJMSettlement may hold a defaulting Participant's Financial Security for as long as such party's positions exist and consistent with the PJM credit policy in this Attachment Q, in order to protect PJM's membership from default.

No payments shall be due to a Participant, nor shall any payments be made to a Participant, while the Participant is in default or has been declared in Breach of this policy or the Agreements, or while a Collateral Call is outstanding. PJMSettlement may apply towards an ongoing default any amounts that are held or later become available or due to the defaulting Participant through PJM's markets and systems.

In order to cover Obligations, PJMSettlement, may hold a Participant's Financial Security through the end of the billing period which includes the 90th day following the last day a Participant had activity, open positions, or accruing obligations (other than reconciliations and true-ups), and until such Participant has satisfactorily paid any obligations invoiced through such period. Obligations incurred or accrued through such period shall survive any withdrawal from PJM. In event of non-payment, PJMSettlement may apply such Financial Security to such Participant's Obligations, even if Participant had previously announced and effected its withdrawal from PJM.

VII. DEFINITIONS:

Affiliate

Affiliate is defined in the PJM Operating Agreement, §1.2.

Agreements

Agreements are the Operating Agreement of PJM Interconnection, L.L.C., the PJM Open Access Transmission Tariff, the Reliability Assurance Agreement, the Reliability Assurance Agreement – West, and/or other agreements between PJM Interconnection, L.L.C. and its Members.

Applicant

Applicant is an entity desiring to become a PJM Member, or to take Transmission Service that has submitted the PJMSettlement Credit Application, PJMSettlement Credit Agreement and other required submittals as set forth in this policy.

Breach

Breach is the status of a Participant that does not currently meet the requirements of this policy or other provisions of the Agreements.

Business Day

A Business Day is a day in which the Federal Reserve System is open for business and is not a scheduled PJM holiday.

Canadian Guaranty

Canadian Guaranty is a Corporate Guaranty provided by an Affiliate of a Participant that is domiciled in Canada, and meets all of the provisions of this credit policy.

Capacity

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

Collateral Call

Collateral Call is a notice to a Participant that additional Financial Security, or possibly early payment, is required in order to remain in, or to regain, compliance with this policy.

Corporate Guaranty

Corporate Guaranty is a legal document used by one entity to guaranty the obligations of another entity.

Credit Available for Virtual Bidding

Credit Available for Virtual Bidding is a Participant's Working Credit Limit, less its Total Net Obligation.

Credit Score

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

Financial Security

Financial Security is a cash deposit 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.

Foreign Guaranty

Foreign Guaranty is a Corporate Guaranty provided by an Affiliate of a Participant that is domiciled in a foreign country, and meets all of the provisions of this credit policy.

FTR Credit Limit

FTR Credit Limit will be equal to the amount of credit established with PJMSettlement that a Participant has specifically designated to PJMSettlement to be set aside and used for FTR activity. Any such credit so set aside shall not be considered available to satisfy any other credit requirement the Participant may have with PJMSettlement.

FTR Credit Requirement

FTR Credit Requirement is the amount of credit that a Participant must provide in order to support the FTR positions that it holds and/or is bidding for. 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 Flow Undiversified

FTR Flow Undiversified shall have the meaning established in section V.G of this Attachment Q.

FTR Geographically Undiversified

FTR Geographically Undiversified shall have the meaning established in section V.G of this Attachment Q.

FTR Historical Value

FTR Historical Value – For each FTR for each month, this is the historical weighted average value over three years for the FTR path using the following weightings: 50% - most recent year; 30% - second year; 20% - third year. FTR Historical Values shall be calculated separately for on-peak, off-peak, and 24-hour FTRs for each month of the year. FTR Historical Values shall be adjusted by plus or minus ten percent (10%) for cleared counterflow or normal flow FTRs, respectively, in order to mitigate exposure due to uncertainty and fluctuations in actual FTR value.

FTR Monthly Credit Requirement Contribution

FTR Monthly Credit Requirement Contribution - For each FTR for each month, this is 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 Portfolio Auction Value

FTR Portfolio Auction Value shall mean for each Participant (or Participant account), the sum, calculated on a monthly basis, across all FTRs, of the FTR price times the FTR volume in MW. For the purpose of determining portfolio diversification and the associated FTR credit requirement for a load serving Participant, negatively priced FTRs that sink at their load location

(as determined from the effective ARR allocation) shall be excluded from this calculation. However, for the purposes of this calculation, the MW quantity of FTRs shall not exceed the peak load of the load serving Participant at each location.

Market Participant

Market Participant shall have the meaning provided in the Operating Agreement.

Material

For these purposes, material is defined in §I.B.3, Material Changes. For the purposes herein, the use of the term "material" is not necessarily synonymous with use of the term by governmental agencies and regulatory bodies.

Member

Member shall have the meaning provided in the Operating Agreement.

Net Obligation

Net Obligation is the amount owed to PJMSettlement and PJM for purchases from the PJM Markets, Transmission Service, (under both Part II and Part III of the O.A.T.T.), 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 is the amount of Net Obligation when Net Obligation is negative.

Nodal Reference Price

Nodal Reference Price is a probabilistic (97%) maximum price differential historically experienced between day-ahead and real-time market prices at a given location as defined in this policy period. This number is used in Virtual Bid Screening.

Obligation

Obligation is all amounts owed to PJMSettlement for purchases from the PJM Markets, Transmission Service, (under both Part II and Part III of the O.A.T.T.), 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.

Operating Agreement of PJM Interconnection, L.L.C., (“Operating Agreement”)

The Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., dated as of June 2, 1997, on file with the Federal Energy Regulatory Commission, and as revised from time to time.

Participant

A Participant is a Market Participant and/or Transmission Customer and/or Applicant.

Peak Market Activity

Peak Market Activity is 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 section II.D of this Credit Policy.

PJM Markets

The PJM Markets are the PJM Interchange Energy Market and the PJM Capacity markets as established by the Operating Agreement. Also any other markets that exist or may be established in the future wherein Participants may incur Obligations to PJMSettlement.

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

The Open Access Transmission Tariff of PJM Interconnection, L.L.C., on file with the Federal Energy Regulatory Commission, and as revised from time to time.

Reliability Assurance Agreement (“R.A.A.”)

See the definition of the Reliability Assurance Agreement (“R.A.A.”) in the Operating Agreement.

Seller Credit

A Seller Credit is a form of Unsecured Credit extended to Participants that have a consistent long-term history of selling into PJM Markets, as defined in this document.

Tangible Net Worth

Tangible Net Worth is all assets (not including any intangible assets such as goodwill) less all liabilities. Any such calculation may be reduced by PJMSettlement upon review of the available financial information.

Total Net Obligation

Total Net Obligation is all unpaid billed Net Obligations plus any unbilled Net Obligation incurred to date, as determined by PJMSettlement on a daily basis, plus any other Obligations owed to PJMSettlement at the time.

Total Net Sell Position

Total Net Sell Position is all unpaid billed Net Sell Positions plus any unbilled Net Sell Positions accrued to date, as determined by PJMSettlement on a daily basis.

Transmission Customer

Transmission Customer is a Transmission Customer is an entity taking service under Part II or Part III of the O.A.T.T.

Transmission Service

Transmission Service is any or all of the transmission services provided by PJM pursuant to Part II or Part III of the O.A.T.T.

Uncleared Bid Exposure

Uncleared Bid Exposure is a measure of exposure from virtual bidding activity relative to a Participant's established credit as defined in this policy. It is used only as a pre-screen to determine whether a Participant's virtual bids should be subject to Virtual Bid Screening.

Unsecured Credit

Unsecured Credit is any credit granted by PJMSettlement to a Participant that is not secured by a form of Financial Security.

Unsecured Credit Allowance

Unsecured Credit Allowance is Unsecured Credit extended by PJMSettlement in an amount determined by PJMSettlement's evaluation of the creditworthiness of a Participant. This is also defined as the amount of credit that a Participant qualifies for based on the strength of its own financial condition without having to provide Financial Security, except that only the Seller Credit form of Unsecured Credit may be utilized to establish a Participant's FTR Credit Limit. See also: "Working Credit Limit."

Virtual Bid Screening

Virtual Bid Screening is the process of reviewing the Virtual Credit Exposure of submitted Day-Ahead market bids, as defined in this policy, against the Credit Available for Virtual Bidding. If the credit required is greater than credit available, then the bids will not be accepted.

Virtual Credit Exposure

Virtual Credit Exposure is the amount of potential credit exposure created by a market participant's bid submitted into the Day-ahead market, as defined in this policy.

Working Credit Limit

Working Credit Limit amount is 75% of the Participant's Unsecured Credit Allowance and/or 75% of the Financial Security provided by the Participant to PJMSettlement. The Working Credit Limit establishes the maximum amount of Total Net Obligation that a Participant may have outstanding at any time.

Operating Agreement

Section 3.3

(Redline Version)

3.3 Counterparty.

(a) In accordance with Section 10.1 of this Agreement, the Office of the Interconnection shall implement this Agreement and administer the PJM Tariff. Under the Tariff and this Agreement, the LLC administers the provision of transmission service and associated ancillary services to customers and operates and administers various centralized electric power and energy markets. In obtaining transmission service and in these centralized markets, customers conduct transactions with PJMSettlement as a counterparty. Market participants also may conduct bilateral transactions with other market participants and they may self-supply power and energy to the electric loads they serve. Such bilateral and self-supply arrangements are not transactions with PJMSettlement.

(b) For purposes of contracting with customers and conducting financial settlements regarding the use of the transmission capacity of the Transmission System, the LLC has established PJMSettlement. The LLC also has established PJMSettlement as the entity that is the Counterparty with respect to the agreements and transactions in the centralized markets that the LLC administers under the Tariff and the Operating Agreement (i.e., the agreements and transactions that are not bilateral arrangements between market participants or self-supply). PJMSettlement will serve as the Counterparty to Financial Transmission Rights and Auction Revenue Rights instruments held by a Market Participant. Any subsequent bilateral transfer of these instruments by the Market Participant to another Market Participant shall require the consent of PJMSettlement, but shall not implicate PJMSettlement as a contracting party with respect to such subsequent bilateral transfer.

(c) As specified in Section 11 and Schedule 4, Members agree that PJMSettlement is the Counterparty to certain transactions as specified in this Agreement and the PJM Tariff.

(d) As a party to the Consolidated Transmission Owners Agreement, the LLC has acquired the right to use the transmission capacity of the transmission system that is required to provide service under the PJM Tariff and the authorization to resell transmission service using such capacity on the transmission system. Under the Consolidated Transmission Owners Agreement, the LLC compensates the Transmission Owners for the use of their transmission capacity by distributing certain revenues to the Transmission Owners as set forth in the PJM Tariff and the Consolidated Transmission Owners Agreement. The LLC has assigned its right to use the transmission capacity of the Transmission System to PJMSettlement. Accordingly, PJMSettlement shall compensate the Transmission Owners for the use of the transmission capacity required to provide service under the PJM Tariff and this Agreement.

(e) Unless otherwise expressly stated in the PJM Tariff or this Agreement, PJMSettlement shall be the Counterparty to the customers purchasing Transmission Service and Network Integration Transmission Service, and to the other transactions with customers and other entities under the PJM Tariff.

(f) PJMSettlement shall not be a contracting party to other non-transmission transactions that are (i) bilateral transactions between market participants, or (ii) self-supplied or self-scheduled transactions reported to the LLC.

(g) Notwithstanding the foregoing, PJMSettlement shall not be the Counterparty with respect to agreements and transactions regarding the LLC's administration of Parts IV and VI, Schedules 1, 9, 10-NERC, 10-RFC, 14, and 16 of the PJM Tariff.

(h) Confidentiality. PJMSettlement shall be bound by the same confidentiality requirements as the LLC.

(i) PJMSettlement Costs. All costs of the services provided by PJMSettlement for the benefit of Market Participants and Transmission Customers shall be included in the charges for Administrative Services set forth in Schedule 9 of the PJM Tariff.

(j) Amendment of Previously Effective Arrangements.

(i) Transmission Service Agreements. Transmission Service Agreements in effect at the time this Section 3.3 becomes effective shall be deemed to be revised to include PJMSettlement as a Counterparty to the Transmission Service Agreement in the same manner and to the same extent as agreements entered after the effective date of this Section 3.3.

(ii) Reliability Pricing Model. PJMSettlement shall be the Counterparty to the transactions arising from the cleared Base Residual Auctions and Incremental Auctions that occurred prior to the effective date of this Section 3.3 and for which delivery will occur after the effective date of this Section 3.3 in the same manner and to the same extent as transactions arising from auctions cleared after the effective date of this Section 3.3.

(iii) Auction Revenue Rights and Financial Transmission Rights. PJMSettlement shall be the Counterparty with respect to the rights and obligations arising from Auction Revenue Rights and Financial Transmission Rights acquired in an auction or assigned by PJM prior to the effective date of this Section 3.3 to the same extent as with respect to rights and obligations arising from auctions or assignments of Auction Revenue Rights and Financial Transmission Rights after the effective date of this Section 3.3.

Operating Agreement

Section 3.3

(Non-Redline Version)

3.3 Counterparty.

(a) In accordance with Section 10.1 of this Agreement, the Office of the Interconnection shall implement this Agreement and administer the PJM Tariff. Under the Tariff and this Agreement, the LLC administers the provision of transmission service and associated ancillary services to customers and operates and administers various centralized electric power and energy markets. In obtaining transmission service and in these centralized markets, customers conduct transactions with PJMSettlement as a counterparty. Market participants also may conduct bilateral transactions with other market participants and they may self-supply power and energy to the electric loads they serve. Such bilateral and self-supply arrangements are not transactions with PJMSettlement.

(b) For purposes of contracting with customers and conducting financial settlements regarding the use of the transmission capacity of the Transmission System, the LLC has established PJMSettlement. The LLC also has established PJMSettlement as the entity that is the Counterparty with respect to the agreements and transactions in the centralized markets that the LLC administers under the Tariff and the Operating Agreement (i.e., the agreements and transactions that are not bilateral arrangements between market participants or self-supply). PJMSettlement will serve as the Counterparty to Financial Transmission Rights and Auction Revenue Rights instruments held by a Market Participant. Any subsequent bilateral transfer of these instruments by the Market Participant to another Market Participant shall require the consent of PJMSettlement, but shall not implicate PJMSettlement as a contracting party with respect to such subsequent bilateral transfer.

(c) As specified in Section 11 and Schedule 4, Members agree that PJMSettlement is the Counterparty to certain transactions as specified in this Agreement and the PJM Tariff.

(d) As a party to the Consolidated Transmission Owners Agreement, the LLC has acquired the right to use the transmission capacity of the transmission system that is required to provide service under the PJM Tariff and the authorization to resell transmission service using such capacity on the transmission system. Under the Consolidated Transmission Owners Agreement, the LLC compensates the Transmission Owners for the use of their transmission capacity by distributing certain revenues to the Transmission Owners as set forth in the PJM Tariff and the Consolidated Transmission Owners Agreement. The LLC has assigned its right to use the transmission capacity of the Transmission System to PJMSettlement. Accordingly, PJMSettlement shall compensate the Transmission Owners for the use of the transmission capacity required to provide service under the PJM Tariff and this Agreement.

(e) Unless otherwise expressly stated in the PJM Tariff or this Agreement, PJMSettlement shall be the Counterparty to the customers purchasing Transmission Service and Network Integration Transmission Service, and to the other transactions with customers and other entities under the PJM Tariff.

(f) PJMSettlement shall not be a contracting party to other non-transmission transactions that are (i) bilateral transactions between market participants, or (ii) self-supplied or self-scheduled transactions reported to the LLC.

(g) Notwithstanding the foregoing, PJMSettlement shall not be the Counterparty with respect to agreements and transactions regarding the LLC's administration of Parts IV and VI, Schedules 1, 9, 10-NERC, 10-RFC, 14, and 16 of the PJM Tariff.

(h) Confidentiality. PJMSettlement shall be bound by the same confidentiality requirements as the LLC.

(i) PJMSettlement Costs. All costs of the services provided by PJMSettlement for the benefit of Market Participants and Transmission Customers shall be included in the charges for Administrative Services set forth in Schedule 9 of the PJM Tariff.

(j) Amendment of Previously Effective Arrangements.

(i) Transmission Service Agreements. Transmission Service Agreements in effect at the time this Section 3.3 becomes effective shall be deemed to be revised to include PJMSettlement as a Counterparty to the Transmission Service Agreement in the same manner and to the same extent as agreements entered after the effective date of this Section 3.3.

(ii) Reliability Pricing Model. PJMSettlement shall be the Counterparty to the transactions arising from the cleared Base Residual Auctions and Incremental Auctions that occurred prior to the effective date of this Section 3.3 and for which delivery will occur after the effective date of this Section 3.3 in the same manner and to the same extent as transactions arising from auctions cleared after the effective date of this Section 3.3.

(iii) Auction Revenue Rights and Financial Transmission Rights. PJMSettlement shall be the Counterparty with respect to the rights and obligations arising from Auction Revenue Rights and Financial Transmission Rights acquired in an auction or assigned by PJM prior to the effective date of this Section 3.3 to the same extent as with respect to rights and obligations arising from auctions or assignments of Auction Revenue Rights and Financial Transmission Rights after the effective date of this Section 3.3.

**Revisions to Existing Sections of the
Operating Agreement
(Redline Version)**

OA OPERATING AGREEMENT - OA 15. ENFORCEMENT OF OBLIGATIONS - OA 15.2 Enforcement of Obligations.

15.2 Enforcement of Obligations.

If the Office of the Interconnection sends a notice to the PJM Board that a Member has failed to perform an obligation under this Agreement, the PJM Board, on behalf of the LLC and PJMSettlement, shall initiate such action against such Member to enforce such obligation as the PJM Board shall deem appropriate. Subject to the procedures specified in Section 15.1, a Member's failure to perform such obligation shall be deemed to be a default under this Agreement. In order to remedy a default, but without limiting any rights the LLC or PJMSettlement may have against the defaulting Member, the PJM Board may assess against, and collect from, the Members not in default, in proportion to their Default Allocation Assessment, an amount equal to the amount that the defaulting Member has failed to pay to the Office of the Interconnection (less amounts covered by Financial Security, as defined in Attachment Q to the PJM Tariff, held by PJMSettlement, on behalf of itself and as agent for the LLC, or PJMSettlement), along with appropriate interest. Such assessment shall in no way relieve the defaulting Member of its obligations. A Member that has paid such an assessment to the LLC or PJMSettlement shall have an independent right to seek and obtain payment and recovery from the defaulting Member of the amount of the assessment the Member paid to the LLC or PJMSettlement. In addition to any amounts in default, the defaulting Member shall be liable to the LLC and PJMSettlement for all reasonable costs incurred in enforcing the defaulting Member's obligations.

15.2.1 Collection by the Office of the Interconnection.

By vote at any Members Committee meeting, a majority of the Members that have paid a Default Allocation Assessment may request and appoint the Office of the Interconnection to act as agent on behalf of the Members that have paid a Default Allocation Assessment, solely for the purpose of pursuing and collecting any amounts so assessed; provided, however, that any Member that does not desire for the Office of the Interconnection to act on their behalf with regard to such collection shall so inform the Office of the Interconnection. In the event that the Office of the Interconnection is appointed as agent for the Members, the Office of the Interconnection shall be authorized to pursue collection through such actions, legal or otherwise, as it reasonably deems appropriate, including but not limited to the prosecution of legal actions and assertion of claims on behalf of the affected Members in the state and federal courts as well as under the United States Bankruptcy Code; provided, however, that the Office of the Interconnection shall take no action on behalf of those Members that have requested that the Office of the Interconnection not act on their behalf. After deducting the costs of collection, any amounts recovered by the Office of the Interconnection on behalf of the affected Members shall be distributed to the Members who have paid their Default Allocation Assessment in proportion to the Default Allocation Assessment paid by each Member except those Members who informed the Office of the Interconnection that it should not act as their agent.

15.2.2 Default Allocation Assessment.

(a) "Default Allocation Assessment" shall be equal to $(0.1(1/N) + 0.9(A/Z))$, where:

Intra-PJM Tariffs

N = the total number of Members, calculated as of five o'clock p.m. eastern prevailing time on the date PJM declares a Member in default, excluding ex officio Members, State Consumer Advocates, Emergency and Economic Load Response Program Special Members, and municipal electric system Members that have been granted a waiver under section 17.2 of this Agreement.

A = for Members comprising factor "N" above, the Member's gross activity as determined by summing the absolute values of the charges and credits for each of the Activity Line Items identified in section 15.2.2(b) of this Agreement as accounted for and billed pursuant to section 3 of Schedule 1 of this Agreement for the month of default and the two previous months.

Z = the sum of factor A for all Members excluding ex officio Members, State Consumer Advocates, Emergency and Economic Load Response Program Special Members, and municipal electric system Members that have been granted a waiver under section 17.2 of this Agreement.

The assessment value of $(0.1(1/N))$ shall not exceed \$10,000 per Member per calendar year, cumulative of all defaults. If one or more defaults arise that cause the value to exceed \$10,000 per Member, then the excess shall be reallocated through the gross activity factor.

(b) Activity Line Items shall be each of the line items on the PJM monthly bills net of load reconciliation adjustments and adjustments applicable to activity for the current billing month appearing on the same bill.

OA OPERATING AGREEMENT - OA SCHEDULE 1 - OA 5. CALCULATION OF CHARGES AND CREDITS FOR TRANS - OA 5.4 Transmission Loss Charge Calculation.

5.4 Transmission Loss Charge Calculation.

5.4.1 Calculation by Office of the Interconnection.

The Office of the Interconnection shall calculate Transmission Loss Charges for each Network Service User, the PJM Interchange Energy Market, and each Transmission Customer.

5.4.2 General.

(a) The basis for the Transmission Loss Charges shall be the differences in the Locational Marginal Prices, defined as the Loss Price at a bus, between points of delivery and points of receipt, as determined in accordance with Section 2 of this Schedule.

(b) The Office of the Interconnection shall calculate Loss Prices in the form of Day-ahead Loss Prices and Real-time Loss Prices for the PJM Region, in accordance with Section 2 of this Schedule.

5.4.3 Network Service User Calculation.

(a) Each Network Service User shall be charged for the increased cost of transmission losses to deliver the output of its firm Capacity Resources or other owned or contracted for resources, its firm bilateral purchases, and its non-firm bilateral purchases. The Transmission Loss Charge for deliveries from each such source shall be the Network Service User's hourly losses net bill.

(b) Market Buyers shall be charged for transmission losses resulting from all load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served from the PJM Interchange Energy Market in the Day-ahead Energy Market at the Day-ahead Loss Price applicable to each relevant load bus.

(c) Generating Market Buyers shall be reimbursed for transmission losses resulting from all energy scheduled to be delivered to the PJM Interchange Energy Market in the Day-ahead Energy Market at the Day-ahead Loss Price applicable to each relevant generation bus.

(d) Market Sellers shall be reimbursed for transmission losses resulting from all energy scheduled to be delivered in the Day-ahead Energy Market at the Day-ahead Loss Prices applicable to each relevant generation bus.

(e) The hourly net amount of energy delivered at each generation bus is determined by revenue meter data, if available, or by the State Estimator, if revenue meter data is not available. The total load actually served at each load bus is initially determined by the State Estimator. For each Electric Distributor that reports hourly net energy flows from metered tie lines and for which all generators within the Electric Distributor's territory report revenue quality, hourly net energy delivered, the total revenue meter load within the Electric Distributor's territory is calculated as the sum of all net import energy flows reported by their tie revenue meters and all

net generation reported via generator revenue meters. The amount of load at each of such Electric Distributor's load buses calculated by the State Estimator is then adjusted, in proportion to its share of the total load of that Electric Distributor, in order that the total amount of load across all of the Electric Distributor's load buses matches its total revenue meter calculated load.

(f) At the end of each hour during an Operating Day, the Office of the Interconnection shall calculate the Transmission Loss Charges at each Market Buyer's load bus to be charged for losses at Real-time Loss Prices determined by the product of the hourly Real-time Loss Prices at the relevant bus times the Market Buyer's megawatts of load (net of operating Behind The Meter Generation, but not to be less than zero) at the bus in that hour in excess of the load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served at that bus in the hour in the Day-ahead Energy Market. To the extent that the load (net of operating Behind The Meter Generation, but not to be less than zero) actually served at a load bus is less than the load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served at that bus in the Day-ahead Energy Market, the Market Buyer shall be paid for the difference at the Real-time Loss Price for the load bus at the time of the shortfall. The megawatts of load at each load bus shall be the sum of the megawatts of load (net of operating Behind The Meter Generation, but not less than zero) for that bus of that Market Buyer plus any megawatts of that Market Buyer's bilateral sales attributable to that bus. The total load charge for each Market Buyer shall be the sum, for each of a Market Buyer's load buses, of the charges at Day-ahead Loss Price determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1a plus the charges at Real-time Loss Prices determined as specified herein, net of any payments specified herein for each of the Market Buyer's load buses.

(g) At the end of each hour during an Operating Day, the Office of the Interconnection shall calculate the transmission loss payments at each Generating Market Buyer's generation bus to be paid at Real-time Loss Prices, determined by the product of the hourly Real-time Loss Price at the relevant bus times the Generating Market Buyer's megawatts of generation at such generation bus in the hour in excess of the energy scheduled to be injected at that bus in that hour in the Day-ahead Energy Market. To the extent that the energy actually injected at the generation bus is less than the energy scheduled to be injected at that bus in the Day-ahead Energy Market, the Generating Market Buyer shall be debited for the difference at the Real-time Loss Price for the generation bus at the time of the shortfall. The megawatts of generation at each generation bus shall be the sum of the megawatts of generation for that bus of that Generating Market Buyer plus any megawatts of bilateral purchases of that Generating Market Buyer attributable to that bus. The total generation revenue for each Generating Market Buyer shall be the sum, for each of the Generating Market Buyer's generation buses, of the revenues at Day-ahead Loss Price determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1A plus the revenues at Real-time Loss Prices determined as specified herein, net of any debits specified herein for each of the Market Buyer's generation buses.

(h) A Market Seller shall be paid for transmission losses that results from the Real-time sales of Spot Market Energy to the extent of its hourly net deliveries to the PJM Region of energy in excess of amounts scheduled in the Day-ahead Energy Market from the Market Seller's resources. For pool External Resources, the Office of the Interconnection shall model, based on

an appropriate flow analysis, the hourly amounts delivered from each such resource to the corresponding Interface Pricing Point between adjacent Control Areas and the PJM Region. The total real-time generation revenues for each Market Seller shall be the sum of its credits determined by the product of (i) the hourly net amount of energy delivered to the PJM Region at the applicable generation or interface bus in excess of the amount scheduled to be delivered in that hour at that bus in the Day-ahead Energy Market from each of the Market Seller's resources, times (ii) the hourly Real-time Loss Price at that bus. To the extent that the energy actually injected at a generation bus or Interface Pricing Point in any hour is less than the energy scheduled to be injected at that bus or point in the Day-ahead Energy Market, the Market Seller shall be debited for the difference at the Real-time Loss Price for the applicable bus or point at the time of the shortfall times the amount of the shortfall. The total generation revenue for each Market Seller shall be the sum, for each of the Market Seller's generation buses or Interface Pricing Points, of the revenues at Day-ahead Loss Prices determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1A plus the revenues at Real-time Loss Prices determined as specified herein, net of any debits specified herein for each of the Market Seller's generation buses or Interface Pricing Points.

5.4.4 Transmission Customer Calculation.

Each Transmission Customer using Firm Point-to-Point Transmission Service (as defined in the PJM Tariff), and each Transmission Customer using Non-Firm Point-to-Point Transmission Service (as defined in the PJM Tariff), shall be charged for the increased cost of transmission losses for the delivery of energy using Point-to-Point Transmission Service. Except as specified in this subsection, a Transmission Loss Charge shall be assessed for transmission use scheduled in the Day-ahead Energy Market, calculated as the amount to be delivered multiplied by the difference between the Day-ahead Loss Price at the delivery point or the delivery Interface Pricing Point at the boundary of the PJM Region and the Day-ahead Loss Price at the source point or the source Interface Pricing Point at the boundary of the PJM Region. Transmission Loss Charges shall be assessed for real-time transmission use in excess of the amounts scheduled for each hour in the Day-ahead Energy Market, calculated as the excess amount multiplied by the difference between the Real-time Loss Price at the delivery point or the delivery Interface Pricing Point at the boundary of the PJM Region, and the Real-time Loss Price at the source point or the source Interface Pricing Point at the boundary of the PJM Region. A Transmission Customer shall be paid for Transmission Loss Charges for real-time transmission use falling below the amounts scheduled for each hour in the Day-ahead Energy Market, calculated as the shortfall amount multiplied by the difference between the Real-time Loss Price at the delivery point or the delivery Interface Pricing Point at the boundary of the PJM Region, and the Real-time Loss Price at the source point or the source Interface Pricing Point at the boundary of the PJM Region. Real-time deviations from the Point-to-Point Transmission Service scheduled in the Day-ahead Energy Market shall be determined by the lesser of the real-time injection or withdrawal associated with such transmission service.

5.4.5 Total Transmission Loss Charges.

Intra-PJM Tariffs

The total Transmission Loss Charges collected by the PJMSettlement ~~Office of the Interconnection~~ each hour will be the aggregate net amounts determined as specified in this Schedule.

**OA OPERATING AGREEMENT - OA SCHEDULE 1 - OA 5. CALCULATION OF CHARGES AND CREDITS
FOR TRANS - OA 5.5 Distribution of Total Transmission Loss Charges**

5.5 Distribution of Total Transmission Loss Charges.

The total Transmission Loss Charges accumulated by the ~~Office of Interconnection~~ PJM Settlement in any hour shall be distributed pro-rata to each Network Service User and Transmission Customer in proportion to its ratio shares of the total MWhs of energy delivered to load (net of operating Behind The Meter Generation, but not to be less than zero) in the PJM Region, or the total exports of MWh of energy from the PJM Region (that paid for transmission service during such hour). Exports of energy for which Non-Firm Point-to-Point Transmission Service was utilized and for which the Non-Firm Point-to-Point Transmission Service rate was paid will receive an allocation of the total Transmission Loss Charges based on a percentage of the MWh of energy exported on such service, determined by the ratio of Non-Firm Point-to-Point Transmission Service rate to Firm Point-to-Point Transmission Service rate.

OA OPERATING AGREEMENT - OA SCHEDULE 1 - OA 7. FINANCIAL TRANSMISSION RIGHTS AUCTIONS - OA 7.2 Financial Transmission Rights Characteristics

7.2 Financial Transmission Rights Characteristics.

7.2.1 Reconfiguration of Financial Transmission Rights.

Through an appropriate linear programming model, the Office of the Interconnection shall reconfigure the Financial Transmission Rights offered or otherwise available for sale in any auction to maximize the value to the bidders of the Financial Transmission Rights sold, provided that any Financial Transmission Rights acquired at auction shall be simultaneously feasible in combination with those Financial Transmission Rights outstanding at the time of the auction and not sold in the auction. The linear programming model shall, while respecting transmission constraints and the maximum MW quantities of the bids and offers, select the set of simultaneously feasible Financial Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers.

7.2.2 Specified Receipt and Delivery Points.

The Office of the Interconnection will post the list of available receipt and delivery points for each Financial Transmission Rights Auction before the start of the bidding window. Auction bids for annual Financial Transmission Rights Obligations may specify as receipt and delivery points any combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points. Auction bids for annual Financial Transmission Rights Options may specify as receipt and delivery points such combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points as the Office of the Interconnection shall allow from time to time as set forth in PJM Manual 06: Financial Transmission Rights. Auction bids for Financial Transmission Rights submitted in the monthly auctions may specify as receipt and delivery points any combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points for bids that cover any month beyond the next month, including bids that cover Planning Period Quarters or the Planning Period Balance. Auction bids for Financial Transmission Rights submitted in the monthly auctions that cover the single calendar month period immediately following the month in which the monthly auction is conducted may specify any combination of available receipt and delivery buses represented in the State Estimator model for which the Office of the Interconnection calculates and posts Locational Marginal Prices. Auction bids may specify available receipt and delivery points from locations outside of the PJM Region to locations inside such region, from locations within the PJM Region to locations outside such region, or to and from locations within the PJM Region.

7.2.3 Transmission Congestion Charges.

Financial Transmission Rights shall entitle holders thereof to credits only for Transmission Congestion Charges, and shall not confer a right to credits for payments arising from or relating to transmission congestion made to any entity other than the PJM Settlement Office of the Interconnection.

**Revisions to Existing Sections of the
Operating Agreement
(Non-Redline Version)**

OA OPERATING AGREEMENT - OA 15. ENFORCEMENT OF OBLIGATIONS - OA 15.2 Enforcement of Obligations.

15.2 Enforcement of Obligations.

If the Office of the Interconnection sends a notice to the PJM Board that a Member has failed to perform an obligation under this Agreement, the PJM Board, on behalf of the LLC and PJMSettlement, shall initiate such action against such Member to enforce such obligation as the PJM Board shall deem appropriate. Subject to the procedures specified in Section 15.1, a Member's failure to perform such obligation shall be deemed to be a default under this Agreement. In order to remedy a default, but without limiting any rights the LLC or PJMSettlement may have against the defaulting Member, the PJM Board may assess against, and collect from, the Members not in default, in proportion to their Default Allocation Assessment, an amount equal to the amount that the defaulting Member has failed to pay to the Office of the Interconnection (less amounts covered by Financial Security, as defined in Attachment Q to the PJM Tariff, held by PJMSettlement, on behalf of itself and as agent for the LLC, or indemnifications paid to the LLC or PJMSettlement), along with appropriate interest. Such assessment shall in no way relieve the defaulting Member of its obligations. A Member that has paid such an assessment to the LLC or PJMSettlement shall have an independent right to seek and obtain payment and recovery from the defaulting Member of the amount of the assessment the Member paid to the LLC or PJMSettlement. In addition to any amounts in default, the defaulting Member shall be liable to the LLC and PJMSettlement for all reasonable costs incurred in enforcing the defaulting Member's obligations.

15.2.1 Collection by the Office of the Interconnection.

By vote at any Members Committee meeting, a majority of the Members that have paid a Default Allocation Assessment may request and appoint the Office of the Interconnection to act as agent on behalf of the Members that have paid a Default Allocation Assessment, solely for the purpose of pursuing and collecting any amounts so assessed; provided, however, that any Member that does not desire for the Office of the Interconnection to act on their behalf with regard to such collection shall so inform the Office of the Interconnection. In the event that the Office of the Interconnection is appointed as agent for the Members, the Office of the Interconnection shall be authorized to pursue collection through such actions, legal or otherwise, as it reasonably deems appropriate, including but not limited to the prosecution of legal actions and assertion of claims on behalf of the affected Members in the state and federal courts as well as under the United States Bankruptcy Code; provided, however, that the Office of the Interconnection shall take no action on behalf of those Members that have requested that the Office of the Interconnection not act on their behalf. After deducting the costs of collection, any amounts recovered by the Office of the Interconnection on behalf of the affected Members shall be distributed to the Members who have paid their Default Allocation Assessment in proportion to the Default Allocation Assessment paid by each Member except those Members who informed the Office of the Interconnection that it should not act as their agent.

15.2.2 Default Allocation Assessment.

(a) "Default Allocation Assessment" shall be equal to $(0.1(1/N) + 0.9(A/Z))$, where:

N = the total number of Members, calculated as of five o'clock p.m. eastern prevailing time on the date PJM declares a Member in default, excluding ex officio Members, State Consumer Advocates, Emergency and Economic Load Response Program Special Members, and municipal electric system Members that have been granted a waiver under section 17.2 of this Agreement.

A = for Members comprising factor "N" above, the Member's gross activity as determined by summing the absolute values of the charges and credits for each of the Activity Line Items identified in section 15.2.2(b) of this Agreement as accounted for and billed pursuant to section 3 of Schedule 1 of this Agreement for the month of default and the two previous months.

Z = the sum of factor A for all Members excluding ex officio Members, State Consumer Advocates, Emergency and Economic Load Response Program Special Members, and municipal electric system Members that have been granted a waiver under section 17.2 of this Agreement.

The assessment value of $(0.1(1/N))$ shall not exceed \$10,000 per Member per calendar year, cumulative of all defaults. If one or more defaults arise that cause the value to exceed \$10,000 per Member, then the excess shall be reallocated through the gross activity factor.

(b) Activity Line Items shall be each of the line items on the PJM monthly bills net of load reconciliation adjustments and adjustments applicable to activity for the current billing month appearing on the same bill.

OA OPERATING AGREEMENT - OA SCHEDULE 1 - OA 5. CALCULATION OF CHARGES AND CREDITS FOR TRANS - OA 5.4 Transmission Loss Charge Calculation.

5.4 Transmission Loss Charge Calculation.

5.4.1 Calculation by Office of the Interconnection.

The Office of the Interconnection shall calculate Transmission Loss Charges for each Network Service User, the PJM Interchange Energy Market, and each Transmission Customer.

5.4.2 General.

(a) The basis for the Transmission Loss Charges shall be the differences in the Locational Marginal Prices, defined as the Loss Price at a bus, between points of delivery and points of receipt, as determined in accordance with Section 2 of this Schedule.

(b) The Office of the Interconnection shall calculate Loss Prices in the form of Day-ahead Loss Prices and Real-time Loss Prices for the PJM Region, in accordance with Section 2 of this Schedule.

5.4.3 Network Service User Calculation.

(a) Each Network Service User shall be charged for the increased cost of transmission losses to deliver the output of its firm Capacity Resources or other owned or contracted for resources, its firm bilateral purchases, and its non-firm bilateral purchases. The Transmission Loss Charge for deliveries from each such source shall be the Network Service User's hourly losses net bill.

(b) Market Buyers shall be charged for transmission losses resulting from all load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served from the PJM Interchange Energy Market in the Day-ahead Energy Market at the Day-ahead Loss Price applicable to each relevant load bus.

(c) Generating Market Buyers shall be reimbursed for transmission losses resulting from all energy scheduled to be delivered to the PJM Interchange Energy Market in the Day-ahead Energy Market at the Day-ahead Loss Price applicable to each relevant generation bus.

(d) Market Sellers shall be reimbursed for transmission losses resulting from all energy scheduled to be delivered in the Day-ahead Energy Market at the Day-ahead Loss Prices applicable to each relevant generation bus.

(e) The hourly net amount of energy delivered at each generation bus is determined by revenue meter data, if available, or by the State Estimator, if revenue meter data is not available. The total load actually served at each load bus is initially determined by the State Estimator. For each Electric Distributor that reports hourly net energy flows from metered tie lines and for which all generators within the Electric Distributor's territory report revenue quality, hourly net energy delivered, the total revenue meter load within the Electric Distributor's territory is calculated as the sum of all net import energy flows reported by their tie revenue meters and all

net generation reported via generator revenue meters. The amount of load at each of such Electric Distributor's load buses calculated by the State Estimator is then adjusted, in proportion to its share of the total load of that Electric Distributor, in order that the total amount of load across all of the Electric Distributor's load buses matches its total revenue meter calculated load.

(f) At the end of each hour during an Operating Day, the Office of the Interconnection shall calculate the Transmission Loss Charges at each Market Buyer's load bus to be charged for losses at Real-time Loss Prices determined by the product of the hourly Real-time Loss Prices at the relevant bus times the Market Buyer's megawatts of load (net of operating Behind The Meter Generation, but not to be less than zero) at the bus in that hour in excess of the load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served at that bus in the hour in the Day-ahead Energy Market. To the extent that the load (net of operating Behind The Meter Generation, but not to be less than zero) actually served at a load bus is less than the load (net of Behind The Meter Generation expected to be operating, but not to be less than zero) scheduled to be served at that bus in the Day-ahead Energy Market, the Market Buyer shall be paid for the difference at the Real-time Loss Price for the load bus at the time of the shortfall. The megawatts of load at each load bus shall be the sum of the megawatts of load (net of operating Behind The Meter Generation, but not less than zero) for that bus of that Market Buyer plus any megawatts of that Market Buyer's bilateral sales attributable to that bus. The total load charge for each Market Buyer shall be the sum, for each of a Market Buyer's load buses, of the charges at Day-ahead Loss Price determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1a plus the charges at Real-time Loss Prices determined as specified herein, net of any payments specified herein for each of the Market Buyer's load buses.

(g) At the end of each hour during an Operating Day, the Office of the Interconnection shall calculate the transmission loss payments at each Generating Market Buyer's generation bus to be paid at Real-time Loss Prices, determined by the product of the hourly Real-time Loss Price at the relevant bus times the Generating Market Buyer's megawatts of generation at such generation bus in the hour in excess of the energy scheduled to be injected at that bus in that hour in the Day-ahead Energy Market. To the extent that the energy actually injected at the generation bus is less than the energy scheduled to be injected at that bus in the Day-ahead Energy Market, the Generating Market Buyer shall be debited for the difference at the Real-time Loss Price for the generation bus at the time of the shortfall. The megawatts of generation at each generation bus shall be the sum of the megawatts of generation for that bus of that Generating Market Buyer plus any megawatts of bilateral purchases of that Generating Market Buyer attributable to that bus. The total generation revenue for each Generating Market Buyer shall be the sum, for each of the Generating Market Buyer's generation buses, of the revenues at Day-ahead Loss Price determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1A plus the revenues at Real-time Loss Prices determined as specified herein, net of any debits specified herein for each of the Market Buyer's generation buses.

(h) A Market Seller shall be paid for transmission losses that results from the Real-time sales of Spot Market Energy to the extent of its hourly net deliveries to the PJM Region of energy in excess of amounts scheduled in the Day-ahead Energy Market from the Market Seller's resources. For pool External Resources, the Office of the Interconnection shall model, based on

an appropriate flow analysis, the hourly amounts delivered from each such resource to the corresponding Interface Pricing Point between adjacent Control Areas and the PJM Region. The total real-time generation revenues for each Market Seller shall be the sum of its credits determined by the product of (i) the hourly net amount of energy delivered to the PJM Region at the applicable generation or interface bus in excess of the amount scheduled to be delivered in that hour at that bus in the Day-ahead Energy Market from each of the Market Seller's resources, times (ii) the hourly Real-time Loss Price at that bus. To the extent that the energy actually injected at a generation bus or Interface Pricing Point in any hour is less than the energy scheduled to be injected at that bus or point in the Day-ahead Energy Market, the Market Seller shall be debited for the difference at the Real-time Loss Price for the applicable bus or point at the time of the shortfall times the amount of the shortfall. The total generation revenue for each Market Seller shall be the sum, for each of the Market Seller's generation buses or Interface Pricing Points, of the revenues at Day-ahead Loss Prices determined in accordance with the Day-ahead Energy Market as specified in Section 1.10.1A plus the revenues at Real-time Loss Prices determined as specified herein, net of any debits specified herein for each of the Market Seller's generation buses or Interface Pricing Points.

5.4.4 Transmission Customer Calculation.

Each Transmission Customer using Firm Point-to-Point Transmission Service (as defined in the PJM Tariff), and each Transmission Customer using Non-Firm Point-to-Point Transmission Service (as defined in the PJM Tariff), shall be charged for the increased cost of transmission losses for the delivery of energy using Point-to-Point Transmission Service. Except as specified in this subsection, a Transmission Loss Charge shall be assessed for transmission use scheduled in the Day-ahead Energy Market, calculated as the amount to be delivered multiplied by the difference between the Day-ahead Loss Price at the delivery point or the delivery Interface Pricing Point at the boundary of the PJM Region and the Day-ahead Loss Price at the source point or the source Interface Pricing Point at the boundary of the PJM Region. Transmission Loss Charges shall be assessed for real-time transmission use in excess of the amounts scheduled for each hour in the Day-ahead Energy Market, calculated as the excess amount multiplied by the difference between the Real-time Loss Price at the delivery point or the delivery Interface Pricing Point at the boundary of the PJM Region, and the Real-time Loss Price at the source point or the source Interface Pricing Point at the boundary of the PJM Region. A Transmission Customer shall be paid for Transmission Loss Charges for real-time transmission use falling below the amounts scheduled for each hour in the Day-ahead Energy Market, calculated as the shortfall amount multiplied by the difference between the Real-time Loss Price at the delivery point or the delivery Interface Pricing Point at the boundary of the PJM Region, and the Real-time Loss Price at the source point or the source Interface Pricing Point at the boundary of the PJM Region. Real-time deviations from the Point-to-Point Transmission Service scheduled in the Day-ahead Energy Market shall be determined by the lesser of the real-time injection or withdrawal associated with such transmission service.

5.4.5 Total Transmission Loss Charges.

The total Transmission Loss Charges collected by the PJM Settlement each hour will be the aggregate net amounts determined as specified in this Schedule.

***OA OPERATING AGREEMENT - OA SCHEDULE 1 - OA 5. CALCULATION OF CHARGES AND CREDITS
FOR TRANS - OA 5.5 Distribution of Total Transmission Loss Cha***

5.5 Distribution of Total Transmission Loss Charges.

The total Transmission Loss Charges accumulated by the PJMSettlement in any hour shall be distributed pro-rata to each Network Service User and Transmission Customer in proportion to its ratio shares of the total MWhs of energy delivered to load (net of operating Behind The Meter Generation, but not to be less than zero) in the PJM Region, or the total exports of MWh of energy from the PJM Region (that paid for transmission service during such hour). Exports of energy for which Non-Firm Point-to-Point Transmission Service was utilized and for which the Non-Firm Point-to-Point Transmission Service rate was paid will receive an allocation of the total Transmission Loss Charges based on a percentage of the MWh of energy exported on such service, determined by the ratio of Non-Firm Point-to-Point Transmission Service rate to Firm Point-to-Point Transmission Service rate.

OA OPERATING AGREEMENT - OA SCHEDULE 1 - OA 7. FINANCIAL TRANSMISSION RIGHTS AUCTIONS - OA 7.2 Financial Transmission Rights Characteristics

7.2 Financial Transmission Rights Characteristics.

7.2.1 Reconfiguration of Financial Transmission Rights.

Through an appropriate linear programming model, the Office of the Interconnection shall reconfigure the Financial Transmission Rights offered or otherwise available for sale in any auction to maximize the value to the bidders of the Financial Transmission Rights sold, provided that any Financial Transmission Rights acquired at auction shall be simultaneously feasible in combination with those Financial Transmission Rights outstanding at the time of the auction and not sold in the auction. The linear programming model shall, while respecting transmission constraints and the maximum MW quantities of the bids and offers, select the set of simultaneously feasible Financial Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers.

7.2.2 Specified Receipt and Delivery Points.

The Office of the Interconnection will post the list of available receipt and delivery points for each Financial Transmission Rights Auction before the start of the bidding window. Auction bids for annual Financial Transmission Rights Obligations may specify as receipt and delivery points any combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points. Auction bids for annual Financial Transmission Rights Options may specify as receipt and delivery points such combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points as the Office of the Interconnection shall allow from time to time as set forth in PJM Manual 06: Financial Transmission Rights. Auction bids for Financial Transmission Rights submitted in the monthly auctions may specify as receipt and delivery points any combination of available hubs, Zones, aggregates, generators, and Interface Pricing Points for bids that cover any month beyond the next month, including bids that cover Planning Period Quarters or the Planning Period Balance. Auction bids for Financial Transmission Rights submitted in the monthly auctions that cover the single calendar month period immediately following the month in which the monthly auction is conducted may specify any combination of available receipt and delivery buses represented in the State Estimator model for which the Office of the Interconnection calculates and posts Locational Marginal Prices. Auction bids may specify available receipt and delivery points from locations outside of the PJM Region to locations inside such region, from locations within the PJM Region to locations outside such region, or to and from locations within the PJM Region.

7.2.3 Transmission Congestion Charges.

Financial Transmission Rights shall entitle holders thereof to credits only for Transmission Congestion Charges, and shall not confer a right to credits for payments arising from or relating to transmission congestion made to any entity other than the PJM Settlement.