

October 1, 2018

The Honorable Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: *PJM Interconnection, L.L.C.*, Docket No. ER19-24-000  
Financial Transmission Rights – Bilateral Transaction  
Indemnification Revisions

Dear Ms. Bose:

PJM Interconnection, L.L.C. (“PJM”), pursuant to section 205 of the Federal Power Act (“FPA”), 16 U.S.C. § 824d, hereby submits revisions to the PJM Open Access Transmission Tariff (“Tariff”), Attachment K-Appendix, section 7.3.9 and identical provision in the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. (“Operating Agreement”), Schedule 1, section 7.3.9.<sup>1</sup>

The proposed revisions provide that for any bilateral Financial Transmission Right (“FTR”)<sup>2</sup> transactions through which a defaulting Member purchased FTR positions, the indemnifying seller of those FTR positions may assume those positions if at the time of the default (or upon the Tariff revisions becoming effective), such positions would have cleared at a loss if sold at the most recent applicable cleared FTR auction prices. These revisions will allow indemnifying sellers to assume the negatively valued FTR positions that they are already responsible for because, as required by the Tariff when selling the FTRs in the first instance, such a seller has agreed to indemnify the membership from a defaulting bilateral FTR buyer as to the FTRs it sold to such buyer.

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<sup>1</sup> All references herein to the Tariff, Attachment K-Appendix, section 7.3.9 also are intended to encompass the identical, parallel provisions in the Operating Agreement, Schedule 1, section 7.3.9. PJM will refer generally to the Tariff throughout this letter to also include the Operating Agreement.

<sup>2</sup> All capitalized terms that are not otherwise defined herein shall have the same meaning as they are defined in the Tariff, Operating Agreement, or the Reliability Assurance Agreement among Load Serving Entities in the PJM Region.

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This filing is not changing the indemnification obligation of the indemnifying bilateral seller.

PJM presented this proposal to its Members at the Markets and Reliability Committee (“MRC”) and Members Committee (“MC”) meeting held on September 27, 2018. The MRC endorsed this proposal with a sector-weighted vote of 3.73 out of 5.00 and the MC endorsed this proposal with a sector-weighted vote of 4.01 out of 5.00.

PJM seeks Federal Energy Regulatory Commission (“Commission”) action on this proposal by November 30, 2018. PJM intends to implement this proposal pursuant to FPA section 205 on December 1, 2018.

## **I. BACKGROUND**

FTRs are financial products that allow Market Participants to hedge the costs of day-ahead transmission congestion. Thus, they allow Market Participants to offset potential charges related to the price risk of delivering energy to specific locations on the grid. FTRs are valued based upon the difference between the day-ahead prices at two pricing points—a source and a sink—on the transmission system. The FTR serves as a benefit, or credit, to the holder if it represents a flow of energy in the same direction as the congested flow. The FTR serves as a liability, or charge, to the holder if it represents a flow of energy in the opposite direction as the congested flow.

Under the Tariff, Attachment K-Appendix, section 5.2.2(d)(iv), an FTR holder that sells an FTR position to another party in a bilateral transaction (rather than at auction) must:

guarantee and indemnify the Office of the Interconnection, PJMSettlement, and the Members for the buyer’s obligation to pay any charges associated with the transferred Financial Transmission Right and for which payment is not made to PJMSettlement by the buyer under such a bilateral transaction.

Under this provision, an indemnifying seller must indemnify PJM and its Members against a defaulting Member buyer’s failure to pay FTR charges that result from the ongoing FTR obligations on which the defaulting Member does not pay the charges. This indemnification provision is not being changed.

On June 21, 2018, PJM declared GreenHat Energy, LLC (“GreenHat”) to be in payment default of its financial obligations associated with GreenHat’s sizable FTR portfolio, which extends from June 2018 through May 2021. As a result of this declaration, PJM initiated procedures to close out and liquidate the FTR positions on which GreenHat continues to default on its obligations, in accordance with Tariff, Attachment K-Appendix, section 7.3.9. Specifically, on June 22, 2018, notice of the default and the anticipated liquidation of GreenHat’s FTR positions was provided to PJM Members. The GreenHat default prompted PJM and its Members to review and consider

clarifications and changes to the provisions related to disposition of a defaulting Member's FTR positions. The changes proposed herein are a result of such review.<sup>3</sup>

## **II. THE PROPOSED TARIFF AND OPERATING AGREEMENT REVISIONS ARE JUST AND REASONABLE**

Any FTR portfolio could include at least some bilaterally-acquired FTRs, and PJM seeks to adopt a provision that would allow indemnifying sellers to assume negatively valued FTR positions on which its indemnified buyer defaulted. Such a provision would provide the opportunity for the indemnifying seller to assume ownership of and manage its exposure to the negatively valued FTRs, regardless of the disposition process for the remaining FTR positions in the defaulting Member's FTR portfolio. At the very least, electing this option would not put the seller in any worse position, since indemnifying sellers are already responsible for the charges associated with those bilateral FTR positions if the indemnified buyer does not pay such costs itself.

The proposed revisions provide that for any bilateral FTR transactions by which a defaulting Member purchased FTR positions, the indemnifying seller of those FTR positions may assume those individual positions that have a negative value at the time of default (or at the time these Tariff revisions go into effect, in the case of defaults prior to December 1, 2018). An FTR position would be considered to have a negative value under the proposed revisions if, in the most recent applicable auction for each FTR prior to the date of the Member's default declaration, or the most recent applicable auction for each FTR prior to the effective date of this provision, if later, those FTR positions would have cleared at a price lower than the original purchase price of the FTR. Under the proposed revisions, an indemnifying seller that elected to assume defaulted FTRs would be required to assume all of the eligible negatively valued indemnified FTR positions as a package.

In effect, this provision will allow an indemnifying seller to assume any defaulted FTR positions for which it has provided indemnification if at the time of the initial default declaration (or at the time these Tariff revisions go into effect, in the case of defaults prior to December 1, 2018), and such positions are valued at a loss. Such an assumption would allow the indemnifying seller the ability to manage its exposure from its indemnification, but it also protects PJM and its Members because the indemnifying seller is assuming the volatility and of course providing the requisite credit. The indemnifying seller would not be eligible to assume positively valued positions, because those positions are not creating a "loss" or "charge" that is not being paid by the defaulting buyer. The positively valued positions could help offset other losses in a

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<sup>3</sup> PJM is filing contemporaneously with this filing three other filings related to the treatment of FTR positions held by Members declared to be in default. Although these four filings are interrelated, each filing is a standalone filing and can and should be accepted on its own merits.

defaulted portfolio for which all Members have a socialized Default Allocation Assessment obligation.

An indemnifying party that is already responsible for covering charges incurred by an indemnified buyer that defaults on its portfolio should be allowed to acquire negatively valued positions for which it is likely to be held responsible. However, an indemnifying seller can only assume negatively valued positions consistent with the indemnification language in Tariff, Attachment K-Appendix, section 5.2.2(d)(iv) which specifically establishes the seller's indemnification for the buyer's obligation to pay any charges arising from the bilaterally traded FTRs. This proposed revision retains an indemnifying Member's obligations but allows that indemnifying Member an opportunity to self-manage its exposure for its indemnification commitment. Further, the fact that under these revisions an indemnifying seller must acquire all or none of the negatively valued positions eligible for assumption will prevent an indemnifying party from picking and choosing which bilaterally traded FTRs it assumes. That this proposal was resoundingly endorsed on a sector-weighted basis suggests that PJM Members from many sectors support amending the Operating Agreement and Tariff to allow indemnifying sellers to acquire negatively valued FTR positions they have already indemnified. Thus, these Tariff revisions are just and reasonable and should be accepted.

### **III. EFFECTIVE DATE**

PJM proposes to implement these revisions on December 1, 2018. Thus, PJM requests that these revisions become effective on December 1, 2018, which is more than sixty days after the date of this filing.

### **IV. CORRESPONDENCE**

The following individuals are designated for inclusion on the official service list in this proceeding and for receipt of any communications regarding this filing:<sup>4</sup>

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<sup>4</sup> To the extent necessary, PJM requests waiver of Rule 203(b)(3) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.203(b)(3), to permit all of the persons listed to be placed on the official service list for this proceeding.

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## **V. DOCUMENTS ENCLOSED**

This filing consists of the following:

1. This transmittal letter;
2. Revisions to the Tariff (in redlined and non-redlined format (as Attachments A and B, respectively) and in electronic tariff filing format as required by Order No. 714<sup>5</sup>); and
3. Revisions to the Operating Agreement (in redlined and non-redlined format (as Attachments C and D, respectively) and in electronic tariff filing format as required by Order No. 714).

## **VI. SERVICE**

PJM has served a copy of this filing on all PJM members and on all state utility regulatory commissions in the PJM Region by posting this filing electronically. In accordance with the Commission's regulations,<sup>6</sup> PJM will post a copy of this filing to the FERC filings section of its internet site, located at the following link:

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<sup>5</sup> *Electronic Tariff Filings*, Order No. 714, 2008–2013 FERC Stats. & Regs., Regs. Preambles ¶ 31,276 (2008), *final rule*, Order No. 714-A, III FERC Stats. & Regs., Regs. Preambles ¶ 31,356 (2014).

<sup>6</sup> *See* 18 C.F.R. §§ 35.2(e), 385.2010(f)(3).

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<http://www.pjm.com/documents/ferc-manuals/ferc-filings.aspx> with a specific link to the newly filed document, and will send an email on the same date as this filing to all PJM members and all state utility regulatory commissions in the PJM Region<sup>7</sup> alerting them that this filing has been made by PJM and is available by following such link. PJM also serves the parties listed on the Commission's official service list for this docket. If the document is not immediately available by using the referenced link, the document will be available through the referenced link within twenty-four hours of the filing. Also, a copy of this filing will be available on the FERC's eLibrary website located at the following link: <http://www.ferc.gov/docs-filing/elibrary.asp> in accordance with the Commission's regulations and Order No. 714.

## VII. CONCLUSION

Accordingly, PJM requests that the Commission accept the enclosed Tariff and Operating Agreement revisions effective December 1, 2018.

Respectfully submitted,

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<sup>7</sup> PJM already maintains, updates, and regularly uses email lists for all PJM members and affected state commissions.

# Attachment A

## Revisions to the PJM Open Access Transmission Tariff

(Marked/Redline Format)

### **7.3 Auction Procedures.**

#### **7.3.1 Role of the Office of the Interconnection.**

Financial Transmission Rights auctions shall be conducted by the Office of the Interconnection in accordance with standards and procedures set forth in the PJM Manuals, such standards and procedures to be consistent with the requirements of this Schedule. PJMSettlement shall be the Counterparty to the purchases and sales of Financial Transmission Rights arising from such auctions, provided however, that PJMSettlement shall not be a contracting party to any subsequent bilateral transfers of Financial Transmission Rights between Market Participants. The conversion of an Auction Revenue Right to a Financial Transmission Right pursuant to this section 7 shall not constitute a purchase or sale transaction to which PJMSettlement is a contracting party. Financial Transmission Rights auctions conducted to liquidate a defaulting Member's Financial Transmission Rights portfolio shall be conducted by the Office of the Interconnection in accordance with the procedures set forth in Section 7.3.9 herein and in accordance with standards and procedures set forth in the PJM Manuals.

#### **7.3.2 Notice of Offer.**

A holder of a Financial Transmission Right wishing to offer the Financial Transmission Right for sale shall notify the Office of the Interconnection of any Financial Transmission Rights to be offered. Each Financial Transmission Rights sold in an auction shall, at the end of the period for which the Financial Transmission Rights were auctioned, revert to the offering holder or the entity to which the offering holder has transferred such Financial Transmission Right, subject to the term of the Financial Transmission Right itself and to the right of such holder or transferee to offer the Financial Transmission Right in the next or any subsequent auction during the term of the Financial Transmission Right.

#### **7.3.3 Pending Applications for Firm Service.**

(a) [Reserved.]

(b) Financial Transmission Rights may be assigned to entities requesting Network Transmission Service or Firm Point-to-Point Transmission Service pursuant to Section 5.2.2 (e), only if such Financial Transmission Rights are simultaneously feasible with all outstanding Financial Transmission Rights, including Financial Transmission Rights effective for the then-current auction period. If an assignment of Financial Transmission Rights pursuant to a pending application for Network Transmission Service or Firm Point-to-Point Transmission Service cannot be completed prior to an auction, Financial Transmission Rights attributable to such transmission service shall not be assigned for the then-current auction period. If a Financial Transmission Right cannot be assigned for this reason, the applicant may withdraw its application, or request that the Financial Transmission Right be assigned effective with the start of the next auction period.

#### **7.3.4 On-Peak, Off-Peak and 24-Hour Periods.**



On-peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auction. On-Peak Financial Transmission Rights shall cover the periods from 7:00 a.m. up to the hour ending at 11:00 p.m. on Mondays through Fridays, except holidays as defined in the PJM Manuals. Off-Peak Financial Transmission Rights shall cover the periods from 11:00 p.m. up to the hour ending 7:00 a.m. on Mondays through Fridays and all hours on Saturdays, Sundays, and holidays as defined in the PJM Manuals. The 24-hour period shall cover the period from hour ending 1:00 a.m. to the hour ending 12:00 midnight on all days. Each bid shall specify whether it is for an on-peak, off-peak, or 24-hour period.

### **7.3.5 Offers and Bids.**

(a) Offers to sell and bids to purchase Financial Transmission Rights shall be submitted during the period set forth in Section 7.1.2, and shall be in the form specified by the Office of the Interconnection in accordance with the requirements set forth below.

(b) Offers to sell shall identify the specific Financial Transmission Right, by term, megawatt quantity and receipt and delivery points, offered for sale. An offer to sell a specified megawatt quantity of Financial Transmission Rights shall constitute an offer to sell a quantity of Financial Transmission Rights equal to or less than the specified quantity. An offer to sell may not specify a minimum quantity being offered. Each offer may specify a reservation price, below which the offeror does not wish to sell the Financial Transmission Right. Offers submitted by entities holding rights to Financial Transmission Rights shall be subject to such reasonable standards for the verification of the rights of the offeror as may be established by the Office of the Interconnection. Offers shall be subject to such reasonable standards for the creditworthiness of the offeror or for the posting of security for performance as the Office of the Interconnection shall establish.

(c) Bids to purchase shall specify the term, megawatt quantity, price per megawatt, and receipt and delivery points of the Financial Transmission Right that the bidder wishes to purchase. A bid to purchase a specified megawatt quantity of Financial Transmission Rights shall constitute a bid to purchase a quantity of Financial Transmission Rights equal to or less than the specified quantity. A bid to purchase may not specify a minimum quantity that the bidder wishes to purchase. A bid may specify receipt and delivery points in accordance with Section 7.2.2 and may include Financial Transmission Rights for which the associated Transmission Congestion Credits may have negative values. Bids shall be subject to such reasonable standards for the creditworthiness of the bidder or for the posting of security for performance as the Office of the Interconnection shall establish.

(d) Bids and offers shall be specified to the nearest tenth of a megawatt and shall be greater than zero. The Office of the Interconnection may require that a market participant shall not submit in excess of 5000 bids and offers for any single monthly auction, or for any single round of the annual auction, when the Office of the Interconnection determines that such limit is required to avoid or mitigate significant system performance problems related to bid/offer volume. Notice of the need to impose such limit shall be provided prior to the start of the bidding period if possible. Where such notice is provided after the start of the bidding period,

market participants shall be required within one day to reduce their bids and offers for such auction below 5000, and the bidding period in such cases shall be extended by one day.

### **7.3.6 Determination of Winning Bids and Clearing Price.**

(a) At the close of each bidding period, the Office of the Interconnection will create a base Financial Transmission Rights power flow model that includes all outstanding Financial Transmission Rights that have been approved and confirmed for any portion of the month for which the auction was conducted and that were not offered for sale in the auction. The base Financial Transmission Rights model also will include estimated uncompensated parallel flows into each interface point of the PJM Region and estimated scheduled transmission outages.

(b) In accordance with the requirements of Section 7.5 of this Schedule and subject to all applicable transmission constraints and reliability requirements, the Office of the Interconnection shall determine the simultaneous feasibility of all outstanding Financial Transmission Rights not offered for sale in the auction and of all Financial Transmission Rights that could be awarded in the auction for which bids were submitted. The winning bids shall be determined from an appropriate linear programming model that, while respecting transmission constraints and the maximum MW quantities of the bids and offers, selects 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. In the event that there are two or more identical bids for the selected Financial Transmission Rights and there are insufficient Financial Transmission Rights to accommodate all of the identical bids, then each such bidder will receive a pro rata share of the Financial Transmission Rights that can be awarded.

(c) Financial Transmission Rights shall be sold at the market-clearing price for Financial Transmission Rights between specified pairs of receipt and delivery points, as determined by the bid value of the marginal Financial Transmission Right that could not be awarded because it would not be simultaneously feasible. The linear programming model shall determine the clearing prices of all Financial Transmission Rights paths based on the bid value of the marginal Financial Transmission Rights, which are those Financial Transmission Rights with the highest bid values that could not be awarded fully because they were not simultaneously feasible, and based on the flow sensitivities of each Financial Transmission Rights path relative to the marginal Financial Transmission Rights paths flow sensitivities on the binding transmission constraints. Financial Transmission Rights with a zero clearing price will only be awarded if there is a minimum of one binding constraint in the auction period for which the Financial Transmission Rights path sensitivity is non-zero.

### **7.3.7 Announcement of Winners and Prices.**

Within two (2) Business Days after the close of the bid and offer period for an annual Financial Transmission Rights auction round, and within five (5) Business Days after the close of the bid and offer period for a monthly Financial Transmission Rights auction, the Office of the Interconnection shall post the winning bidders, the megawatt quantity, the term and the receipt and delivery points for each Financial Transmission Right awarded in the auction and the price at

which each Financial Transmission Right was awarded unless circumstances beyond PJM's control prevent PJM from meeting the applicable deadline. Under such circumstances, PJM will post the auction results at the earliest possible opportunity. The Office of the Interconnection shall not disclose the price specified in any bid to purchase or the reservation price specified in any offer to sell. If the Office of the Interconnection discovers an error in the results posted for a Financial Transmission Rights auction (or a given round of the annual Financial Transmission Rights auction), the Office of the Interconnection shall notify Market Participants of the error as soon as possible after it is found, but in no event later than 5:00 p.m. of the Business Day following the initial publication of the results of the auction or round of the annual auction. After this initial notification, if the Office of the Interconnection determines that it is necessary to post modified results, it shall provide notification of its intent to do so, together with all available supporting documentation, by no later than 5:00 p.m. of the second Business Day following the initial publication of the results of that auction or round of the annual auction. Thereafter, the Office of the Interconnection must post any corrected results by no later than 5:00 p.m. of the fourth calendar day following the initial publication of the results of the auction or round of the annual auction. Should any of the above deadlines pass without the associated action on the part of the Office of the Interconnection, the originally posted results will be considered final. Notwithstanding the foregoing, the deadlines set forth above shall not apply if the referenced auction results are under publicly noticed review by the FERC.

### **7.3.8 Auction Settlements.**

All buyers and sellers of Financial Transmission Rights between the same points of receipt and delivery shall pay PJMSettlement or be paid by PJMSettlement the market-clearing price, as determined in the auction, for such Financial Transmission Rights.

### **7.3.9 Liquidation of Financial Transmission Rights with Bilateral Transactions in the Event of Member Default.**

In the event a Member fails to meet creditworthiness requirements or make timely payments when due pursuant to the PJM Operating Agreement or PJM Tariff, the Office of the Interconnection shall, as soon as practicable after such default is declared, initiate the following procedures to close out and liquidate the Financial Transmission Rights of a Member:

a) The Office of the Interconnection shall close out the defaulting Member's positions as of the date of its default, by unilaterally accelerating and terminating all of the defaulting Member's rights with respect to forward Financial Transmission Rights positions.

b) Following the declaration of default, the Office of the Interconnection shall identify any positions in the defaulting Member's Financial Transmission Rights portfolio when declared in default that were obtained via a Financial Transmission Rights bilateral transaction for which the seller has provided indemnity pursuant to Operating Agreement, Schedule 1, section 5.2.2(d)(iv), and shall notify the seller that it has the right to assume certain bilaterally-traded Financial Transmission Right positions with terms commencing on the first day of the calendar month following such notification by the Office of Interconnection and assumption by seller as set forth below. For this purpose, the Financial Transmission Rights which the seller is

eligible to assume shall be all of those Financial Transmission Rights sold bilaterally by each seller to the defaulting Member which, in the most recent applicable auction for each Financial Transmission Right prior to the date of the Member's default declaration, or the most recent applicable auction for each Financial Transmission Right prior to the effective date of this provision, if later, would have cleared at a price lower than the original purchase price of the Financial Transmission Right. The seller's election must be to assume all or none of the bilaterally-traded positions in the defaulting Member's Financial Transmission Rights portfolio that the seller is eligible to assume per this criteria.

c) If the seller chooses to exercise its right in section 7.3.9(b), above, to assume the identified Financial Transmission Rights, the seller must notify the Office of the Interconnection of its exercise of such assumption right within 10 Business Days of the Office of the Interconnection notification to the seller of the bilaterally-traded positions the seller may elect to assume from the defaulting Member's Financial Transmission Rights portfolio. A seller opting to assume the identified bilaterally-traded Financial Transmission Right positions from the defaulting Member's Financial Transmission Rights portfolio must meet all credit requirements to assume such positions. If a seller elects to assume the identified bilaterally-traded positions and fulfills the applicable credit requirements, those positions will be transferred to the seller's Financial Transmission Rights portfolio on the first calendar day of the first month after the Office of the Interconnection receives the seller's notification of its election to assume the bilaterally-traded positions and has satisfied the applicable credit requirements.

d) If the seller chooses not to exercise its right in section 7.3.9(b), above, to assume the identified Financial Transmission Rights, the seller is still responsible for the indemnification of the bilaterally-traded positions in the defaulting Member's portfolio pursuant to Operating Agreement, Schedule 1, section 5.2.2(d)(iv).

be) The Office of the Interconnection shall post on its website all salient information relating to the closed out portfolio of Financial Transmission Rights.

ef) All current planning period Financial Transmission Right positions within the defaulting Members' Financial Transmission Right portfolio will be offered for sale in the next available monthly balance of planning period Financial Transmission Rights auction at an offer price designed to maximize the likelihood of liquidation of those positions.

dg) Financial Transmission Rights positions that do not settle until the next or subsequent planning period will be offered into the next available Financial Transmission Rights auction (taking into account timing constraints and the need for an orderly liquidation) where, based on the Office of Interconnection's commercially reasonable expectation, such positions would be expected to clear. In the event that the next scheduled Financial Transmission Rights auction is more than two (2) months subsequent to the date that the Office of the Interconnection declares a Member in default, a specially scheduled Financial Transmission Rights auction may be conducted by the Office of the Interconnection. The entire portfolio of the defaulting Member's Financial Transmission Rights will be offered for sale at an offer price designed to maximize the likelihood of liquidation of those positions.

**eh)** The Financial Transmission Right positions comprising the defaulting Member's portfolio that are liquidated in a Financial Transmission Rights auction should avoid setting the price in the auction at the bid prices with which they were initially submitted. In the event that any of the closed out Financial Transmission Rights would set market based on the auction's preliminary solution, then only one-half of each Financial Transmission Rights position will be offered for sale and the auction will be re-executed. In the event that any Financial Transmission Rights position that has been closed out once again sets price, then all Financial Transmission Rights scheduled to be liquidated will be removed from the affected auction and the auction will be re-executed excluding the closed out Financial Transmission Right positions. Financial Transmission Right positions that are not liquidated will then be offered in the next available auction or specially scheduled auction, as appropriate.

**fi)** The liquidation of the defaulting Members' Financial Transmission Rights portfolio pursuant to the foregoing procedures shall result in a final liquidated settlement amount. The final liquidated settlement amount will be included in calculating a Default Allocation Assessment as described in Section 15.1.2A(I) of the PJM Operating Agreement. If the Office of the Interconnection is unable to close out and liquidate a Financial Transmission Rights position under the foregoing procedures, the close out shall be deemed void and the defaulting Member shall remain liable for the full final value of its default, such full final value being realized at the normal time for performance of the Financial Transmission Rights position.

**gj)** *For the period of August 24, 2018 through November 30, 2018, the liquidation process of a defaulting Member's Financial Transmission Rights described in Tariff, Attachment K – Appendix, section 7.3.9(~~ef~~)-(~~fi~~) and the parallel provisions in Operating Agreement, Schedule 1, section 7.3.9(~~ef~~)-(~~fi~~) shall not apply, including, without limitation, that the Office of the Interconnection shall not be required to offer the defaulting Member's Financial Transmission Rights for sale into any auction. During this period, the amount of gain or loss on each of the defaulting Member's Financial Transmission Rights positions shall be realized at the normal time for performance of such Financial Transmission Rights position. The net of such gains and losses for all such positions shall be considered the final monthly settlement amount. Such final monthly settlement amount shall be included in calculating the Default Allocation Assessments as described in Operating Agreement, section 15.1.2A(I). Such assessment shall in no way relieve the defaulting Member of its obligations, including, without limitation, the defaulting Member's obligations arising from or associated with the full value of its default.*

In all other respects, Financial Transmission Rights terminated pursuant to this section shall be liquidated pursuant to the appropriate provisions and procedures set forth in the PJM Manuals.

# Attachment B

## Revisions to the PJM Open Access Transmission Tariff

(Clean Format)

### **7.3 Auction Procedures.**

#### **7.3.1 Role of the Office of the Interconnection.**

Financial Transmission Rights auctions shall be conducted by the Office of the Interconnection in accordance with standards and procedures set forth in the PJM Manuals, such standards and procedures to be consistent with the requirements of this Schedule. PJMSettlement shall be the Counterparty to the purchases and sales of Financial Transmission Rights arising from such auctions, provided however, that PJMSettlement shall not be a contracting party to any subsequent bilateral transfers of Financial Transmission Rights between Market Participants. The conversion of an Auction Revenue Right to a Financial Transmission Right pursuant to this section 7 shall not constitute a purchase or sale transaction to which PJMSettlement is a contracting party. Financial Transmission Rights auctions conducted to liquidate a defaulting Member's Financial Transmission Rights portfolio shall be conducted by the Office of the Interconnection in accordance with the procedures set forth in Section 7.3.9 herein and in accordance with standards and procedures set forth in the PJM Manuals.

#### **7.3.2 Notice of Offer.**

A holder of a Financial Transmission Right wishing to offer the Financial Transmission Right for sale shall notify the Office of the Interconnection of any Financial Transmission Rights to be offered. Each Financial Transmission Rights sold in an auction shall, at the end of the period for which the Financial Transmission Rights were auctioned, revert to the offering holder or the entity to which the offering holder has transferred such Financial Transmission Right, subject to the term of the Financial Transmission Right itself and to the right of such holder or transferee to offer the Financial Transmission Right in the next or any subsequent auction during the term of the Financial Transmission Right.

#### **7.3.3 Pending Applications for Firm Service.**

(a) [Reserved.]

(b) Financial Transmission Rights may be assigned to entities requesting Network Transmission Service or Firm Point-to-Point Transmission Service pursuant to Section 5.2.2 (e), only if such Financial Transmission Rights are simultaneously feasible with all outstanding Financial Transmission Rights, including Financial Transmission Rights effective for the then-current auction period. If an assignment of Financial Transmission Rights pursuant to a pending application for Network Transmission Service or Firm Point-to-Point Transmission Service cannot be completed prior to an auction, Financial Transmission Rights attributable to such transmission service shall not be assigned for the then-current auction period. If a Financial Transmission Right cannot be assigned for this reason, the applicant may withdraw its application, or request that the Financial Transmission Right be assigned effective with the start of the next auction period.

#### **7.3.4 On-Peak, Off-Peak and 24-Hour Periods.**

On-peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auction. On-Peak Financial Transmission Rights shall cover the periods from 7:00 a.m. up to the hour ending at 11:00 p.m. on Mondays through Fridays, except holidays as defined in the PJM Manuals. Off-Peak Financial Transmission Rights shall cover the periods from 11:00 p.m. up to the hour ending 7:00 a.m. on Mondays through Fridays and all hours on Saturdays, Sundays, and holidays as defined in the PJM Manuals. The 24-hour period shall cover the period from hour ending 1:00 a.m. to the hour ending 12:00 midnight on all days. Each bid shall specify whether it is for an on-peak, off-peak, or 24-hour period.

### **7.3.5 Offers and Bids.**

(a) Offers to sell and bids to purchase Financial Transmission Rights shall be submitted during the period set forth in Section 7.1.2, and shall be in the form specified by the Office of the Interconnection in accordance with the requirements set forth below.

(b) Offers to sell shall identify the specific Financial Transmission Right, by term, megawatt quantity and receipt and delivery points, offered for sale. An offer to sell a specified megawatt quantity of Financial Transmission Rights shall constitute an offer to sell a quantity of Financial Transmission Rights equal to or less than the specified quantity. An offer to sell may not specify a minimum quantity being offered. Each offer may specify a reservation price, below which the offeror does not wish to sell the Financial Transmission Right. Offers submitted by entities holding rights to Financial Transmission Rights shall be subject to such reasonable standards for the verification of the rights of the offeror as may be established by the Office of the Interconnection. Offers shall be subject to such reasonable standards for the creditworthiness of the offeror or for the posting of security for performance as the Office of the Interconnection shall establish.

(c) Bids to purchase shall specify the term, megawatt quantity, price per megawatt, and receipt and delivery points of the Financial Transmission Right that the bidder wishes to purchase. A bid to purchase a specified megawatt quantity of Financial Transmission Rights shall constitute a bid to purchase a quantity of Financial Transmission Rights equal to or less than the specified quantity. A bid to purchase may not specify a minimum quantity that the bidder wishes to purchase. A bid may specify receipt and delivery points in accordance with Section 7.2.2 and may include Financial Transmission Rights for which the associated Transmission Congestion Credits may have negative values. Bids shall be subject to such reasonable standards for the creditworthiness of the bidder or for the posting of security for performance as the Office of the Interconnection shall establish.

(d) Bids and offers shall be specified to the nearest tenth of a megawatt and shall be greater than zero. The Office of the Interconnection may require that a market participant shall not submit in excess of 5000 bids and offers for any single monthly auction, or for any single round of the annual auction, when the Office of the Interconnection determines that such limit is required to avoid or mitigate significant system performance problems related to bid/offer volume. Notice of the need to impose such limit shall be provided prior to the start of the bidding period if possible. Where such notice is provided after the start of the bidding period,



market participants shall be required within one day to reduce their bids and offers for such auction below 5000, and the bidding period in such cases shall be extended by one day.

### **7.3.6 Determination of Winning Bids and Clearing Price.**

(a) At the close of each bidding period, the Office of the Interconnection will create a base Financial Transmission Rights power flow model that includes all outstanding Financial Transmission Rights that have been approved and confirmed for any portion of the month for which the auction was conducted and that were not offered for sale in the auction. The base Financial Transmission Rights model also will include estimated uncompensated parallel flows into each interface point of the PJM Region and estimated scheduled transmission outages.

(b) In accordance with the requirements of Section 7.5 of this Schedule and subject to all applicable transmission constraints and reliability requirements, the Office of the Interconnection shall determine the simultaneous feasibility of all outstanding Financial Transmission Rights not offered for sale in the auction and of all Financial Transmission Rights that could be awarded in the auction for which bids were submitted. The winning bids shall be determined from an appropriate linear programming model that, while respecting transmission constraints and the maximum MW quantities of the bids and offers, selects 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. In the event that there are two or more identical bids for the selected Financial Transmission Rights and there are insufficient Financial Transmission Rights to accommodate all of the identical bids, then each such bidder will receive a pro rata share of the Financial Transmission Rights that can be awarded.

(c) Financial Transmission Rights shall be sold at the market-clearing price for Financial Transmission Rights between specified pairs of receipt and delivery points, as determined by the bid value of the marginal Financial Transmission Right that could not be awarded because it would not be simultaneously feasible. The linear programming model shall determine the clearing prices of all Financial Transmission Rights paths based on the bid value of the marginal Financial Transmission Rights, which are those Financial Transmission Rights with the highest bid values that could not be awarded fully because they were not simultaneously feasible, and based on the flow sensitivities of each Financial Transmission Rights path relative to the marginal Financial Transmission Rights paths flow sensitivities on the binding transmission constraints. Financial Transmission Rights with a zero clearing price will only be awarded if there is a minimum of one binding constraint in the auction period for which the Financial Transmission Rights path sensitivity is non-zero.

### **7.3.7 Announcement of Winners and Prices.**

Within two (2) Business Days after the close of the bid and offer period for an annual Financial Transmission Rights auction round, and within five (5) Business Days after the close of the bid and offer period for a monthly Financial Transmission Rights auction, the Office of the Interconnection shall post the winning bidders, the megawatt quantity, the term and the receipt and delivery points for each Financial Transmission Right awarded in the auction and the price at

which each Financial Transmission Right was awarded unless circumstances beyond PJM's control prevent PJM from meeting the applicable deadline. Under such circumstances, PJM will post the auction results at the earliest possible opportunity. The Office of the Interconnection shall not disclose the price specified in any bid to purchase or the reservation price specified in any offer to sell. If the Office of the Interconnection discovers an error in the results posted for a Financial Transmission Rights auction (or a given round of the annual Financial Transmission Rights auction), the Office of the Interconnection shall notify Market Participants of the error as soon as possible after it is found, but in no event later than 5:00 p.m. of the Business Day following the initial publication of the results of the auction or round of the annual auction. After this initial notification, if the Office of the Interconnection determines that it is necessary to post modified results, it shall provide notification of its intent to do so, together with all available supporting documentation, by no later than 5:00 p.m. of the second Business Day following the initial publication of the results of that auction or round of the annual auction. Thereafter, the Office of the Interconnection must post any corrected results by no later than 5:00 p.m. of the fourth calendar day following the initial publication of the results of the auction or round of the annual auction. Should any of the above deadlines pass without the associated action on the part of the Office of the Interconnection, the originally posted results will be considered final. Notwithstanding the foregoing, the deadlines set forth above shall not apply if the referenced auction results are under publicly noticed review by the FERC.

### **7.3.8 Auction Settlements.**

All buyers and sellers of Financial Transmission Rights between the same points of receipt and delivery shall pay PJMSettlement or be paid by PJMSettlement the market-clearing price, as determined in the auction, for such Financial Transmission Rights.

### **7.3.9 Liquidation of Financial Transmission Rights with Bilateral Transactions in the Event of Member Default.**

In the event a Member fails to meet creditworthiness requirements or make timely payments when due pursuant to the PJM Operating Agreement or PJM Tariff, the Office of the Interconnection shall, as soon as practicable after such default is declared, initiate the following procedures to close out and liquidate the Financial Transmission Rights of a Member:

- a) The Office of the Interconnection shall close out the defaulting Member's positions as of the date of its default, by unilaterally accelerating and terminating all of the defaulting Member's rights with respect to forward Financial Transmission Rights positions.
- b) Following the declaration of default, the Office of the Interconnection shall identify any positions in the defaulting Member's Financial Transmission Rights portfolio when declared in default that were obtained via a Financial Transmission Rights bilateral transaction for which the seller has provided indemnity pursuant to Operating Agreement, Schedule 1, section 5.2.2(d)(iv), and shall notify the seller that it has the right to assume certain bilaterally-traded Financial Transmission Right positions with terms commencing on the first day of the calendar month following such notification by the Office of Interconnection and assumption by seller as set forth below. For this purpose, the Financial Transmission Rights which the seller is

eligible to assume shall be all of those Financial Transmission Rights sold bilaterally by each seller to the defaulting Member which, in the most recent applicable auction for each Financial Transmission Right prior to the date of the Member's default declaration, or the most recent applicable auction for each Financial Transmission Right prior to the effective date of this provision, if later, would have cleared at a price lower than the original purchase price of the Financial Transmission Right. The seller's election must be to assume all or none of the bilaterally-traded positions in the defaulting Member's Financial Transmission Rights portfolio that the seller is eligible to assume per this criteria.

c) If the seller chooses to exercise its right in section 7.3.9(b), above, to assume the identified Financial Transmission Rights, the seller must notify the Office of the Interconnection of its exercise of such assumption right within 10 Business Days of the Office of the Interconnection notification to the seller of the bilaterally-traded positions the seller may elect to assume from the defaulting Member's Financial Transmission Rights portfolio. A seller opting to assume the identified bilaterally-traded Financial Transmission Right positions from the defaulting Member's Financial Transmission Rights portfolio must meet all credit requirements to assume such positions. If a seller elects to assume the identified bilaterally-traded positions and fulfills the applicable credit requirements, those positions will be transferred to the seller's Financial Transmission Rights portfolio on the first calendar day of the first month after the Office of the Interconnection receives the seller's notification of its election to assume the bilaterally-traded positions and has satisfied the applicable credit requirements.

d) If the seller chooses not to exercise its right in section 7.3.9(b), above, to assume the identified Financial Transmission Rights, the seller is still responsible for the indemnification of the bilaterally-traded positions in the defaulting Member's portfolio pursuant to Operating Agreement, Schedule 1, section 5.2.2(d)(iv).

e) The Office of the Interconnection shall post on its website all salient information relating to the closed out portfolio of Financial Transmission Rights.

f) All current planning period Financial Transmission Right positions within the defaulting Members' Financial Transmission Right portfolio will be offered for sale in the next available monthly balance of planning period Financial Transmission Rights auction at an offer price designed to maximize the likelihood of liquidation of those positions.

g) Financial Transmission Rights positions that do not settle until the next or subsequent planning period will be offered into the next available Financial Transmission Rights auction (taking into account timing constraints and the need for an orderly liquidation) where, based on the Office of Interconnection's commercially reasonable expectation, such positions would be expected to clear. In the event that the next scheduled Financial Transmission Rights auction is more than two (2) months subsequent to the date that the Office of the Interconnection declares a Member in default, a specially scheduled Financial Transmission Rights auction may be conducted by the Office of the Interconnection. The entire portfolio of the defaulting Member's Financial Transmission Rights will be offered for sale at an offer price designed to maximize the likelihood of liquidation of those positions.

h) The Financial Transmission Right positions comprising the defaulting Member's portfolio that are liquidated in a Financial Transmission Rights auction should avoid setting the price in the auction at the bid prices with which they were initially submitted. In the event that any of the closed out Financial Transmission Rights would set market based on the auction's preliminary solution, then only one-half of each Financial Transmission Rights position will be offered for sale and the auction will be re-executed. In the event that any Financial Transmission Rights position that has been closed out once again sets price, then all Financial Transmission Rights scheduled to be liquidated will be removed from the affected auction and the auction will be re-executed excluding the closed out Financial Transmission Right positions. Financial Transmission Right positions that are not liquidated will then be offered in the next available auction or specially scheduled auction, as appropriate.

i) The liquidation of the defaulting Members' Financial Transmission Rights portfolio pursuant to the foregoing procedures shall result in a final liquidated settlement amount. The final liquidated settlement amount will be included in calculating a Default Allocation Assessment as described in Section 15.1.2A(I) of the PJM Operating Agreement. If the Office of the Interconnection is unable to close out and liquidate a Financial Transmission Rights position under the foregoing procedures, the close out shall be deemed void and the defaulting Member shall remain liable for the full final value of its default, such full final value being realized at the normal time for performance of the Financial Transmission Rights position.

*j) For the period of August 24, 2018 through November 30, 2018, the liquidation process of a defaulting Member's Financial Transmission Rights described in Tariff, Attachment K – Appendix, section 7.3.9(f)-(i) and the parallel provisions in Operating Agreement, Schedule 1, section 7.3.9(f)-(i) shall not apply, including, without limitation, that the Office of the Interconnection shall not be required to offer the defaulting Member's Financial Transmission Rights for sale into any auction. During this period, the amount of gain or loss on each of the defaulting Member's Financial Transmission Rights positions shall be realized at the normal time for performance of such Financial Transmission Rights position. The net of such gains and losses for all such positions shall be considered the final monthly settlement amount. Such final monthly settlement amount shall be included in calculating the Default Allocation Assessments as described in Operating Agreement, section 15.1.2A(I). Such assessment shall in no way relieve the defaulting Member of its obligations, including, without limitation, the defaulting Member's obligations arising from or associated with the full value of its default.*

In all other respects, Financial Transmission Rights terminated pursuant to this section shall be liquidated pursuant to the appropriate provisions and procedures set forth in the PJM Manuals.

# Attachment C

## Revisions to the PJM Operating Agreement

(Marked/Redline Format)

### **7.3 Auction Procedures.**

#### **7.3.1 Role of the Office of the Interconnection.**

Financial Transmission Rights auctions shall be conducted by the Office of the Interconnection in accordance with standards and procedures set forth in the PJM Manuals, such standards and procedures to be consistent with the requirements of this Schedule. PJMSettlement shall be the Counterparty to the purchases and sales of Financial Transmission Rights arising from such auctions, provided however, that PJMSettlement shall not be a contracting party to any subsequent bilateral transfers of Financial Transmission Rights between Market Participants. The conversion of an Auction Revenue Right to a Financial Transmission Right pursuant to this section 7 shall not constitute a purchase or sale transaction to which PJMSettlement is a contracting party. Financial Transmission Rights auctions conducted to liquidate a defaulting Members' Financial Transmission Rights portfolio shall be conducted by the Office of the Interconnection in accordance with the procedures set forth in the Section 7.3.9 herein and with the standards and procedures set forth in the PJM Manuals.

#### **7.3.2 Notice of Offer.**

A holder of a Financial Transmission Right wishing to offer the Financial Transmission Right for sale shall notify the Office of the Interconnection of any Financial Transmission Rights to be offered. Each Financial Transmission Right sold in an auction shall, at the end of the period for which the Financial Transmission Rights were auctioned, revert to the offering holder or the entity to which the offering holder has transferred such Financial Transmission Right, subject to the term of the Financial Transmission Right itself and to the right of such holder or transferee to offer the Financial Transmission Right in the next or any subsequent auction during the term of the Financial Transmission Right.

#### **7.3.3 Pending Applications for Firm Service.**

(a) [Reserved.]

(b) Financial Transmission Rights may be assigned to entities requesting Network Transmission Service or Firm Point-to-Point Transmission Service pursuant to Section 5.2.2 (e), only if such Financial Transmission Rights are simultaneously feasible with all outstanding Financial Transmission Rights, including Financial Transmission Rights effective for the then-current auction period. If an assignment of Financial Transmission Rights pursuant to a pending application for Network Transmission Service or Firm Point-to-Point Transmission Service cannot be completed prior to an auction, Financial Transmission Rights attributable to such transmission service shall not be assigned for the then-current auction period. If a Financial Transmission Right cannot be assigned for this reason, the applicant may withdraw its application, or request that the Financial Transmission Right be assigned effective with the start of the next auction period.

#### **7.3.4 On-Peak, Off-Peak and 24-Hour Periods.**

On-peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auction. On-Peak Financial Transmission Rights shall cover the periods from 7:00 a.m. up to the hour ending at 11:00 p.m. on Mondays through Fridays, except holidays as defined in the PJM Manuals. Off-Peak Financial Transmission Rights shall cover the periods from 11:00 p.m. up to the hour ending 7:00 a.m. on Mondays through Fridays and all hours on Saturdays, Sundays, and holidays as defined in the PJM Manuals. The 24-hour period shall cover the period from hour ending 1:00 a.m. to the hour ending 12:00 midnight on all days. Each bid shall specify whether it is for an on-peak, off-peak, or 24-hour period.

### **7.3.5 Offers and Bids.**

(a) Offers to sell and bids to purchase Financial Transmission Rights shall be submitted during the period set forth in Section 7.1.2, and shall be in the form specified by the Office of the Interconnection in accordance with the requirements set forth below.

(b) Offers to sell shall identify the specific Financial Transmission Right, by term, megawatt quantity and receipt and delivery points, offered for sale. An offer to sell a specified megawatt quantity of Financial Transmission Rights shall constitute an offer to sell a quantity of Financial Transmission Rights equal to or less than the specified quantity. An offer to sell may not specify a minimum quantity being offered. Each offer may specify a reservation price, below which the offeror does not wish to sell the Financial Transmission Right. Offers submitted by entities holding rights to Financial Transmission Rights shall be subject to such reasonable standards for the verification of the rights of the offeror as may be established by the Office of the Interconnection. Offers shall be subject to such reasonable standards for the creditworthiness of the offer or for the posting of security for performance as the Office of the Interconnection shall establish.

(c) Bids to purchase shall specify the term, megawatt quantity, price per megawatt, and receipt and delivery points of the Financial Transmission Right that the bidder wishes to purchase. A bid to purchase a specified megawatt quantity of Financial Transmission Rights shall constitute a bid to purchase a quantity of Financial Transmission Rights equal to or less than the specified quantity. A bid to purchase may not specify a minimum quantity that the bidder wishes to purchase. A bid may specify receipt and delivery points in accordance with Section 7.2.2 and may include Financial Transmission Rights for which the associated Transmission Congestion Credits may have negative values. Bids shall be subject to such reasonable standards for the creditworthiness of the bidder or for the posting of security for performance as the Office of the Interconnection shall establish.

(d) Bids and offers shall be specified to the nearest tenth of a megawatt and shall be greater than zero. The Office of the Interconnection may require that a market participant shall not submit in excess of 5000 bids and offers for any single monthly auction, or for any single round of the annual auction, when the Office of the Interconnection determines that such limit is required to avoid or mitigate significant system performance problems related to bid/offer volume. Notice of the need to impose such limit shall be provided prior to the start of the bidding period if possible. Where such notice is provided after the start of the bidding period,

market participants shall be required within one day to reduce their bids and offers for such auction below 5000, and the bidding period in such cases shall be extended by one day.

### **7.3.6 Determination of Winning Bids and Clearing Price.**

(a) At the close of each bidding period, the Office of the Interconnection will create a base Financial Transmission Rights power flow model that includes all outstanding Financial Transmission Rights that have been approved and confirmed for any portion of the month for which the auction was conducted and that were not offered for sale in the auction. The base Financial Transmission Rights model also will include estimated uncompensated parallel flows into each interface point of the PJM Region and estimated scheduled transmission outages.

(b) In accordance with the requirements of Section 7.5 of this Schedule and subject to all applicable transmission constraints and reliability requirements, the Office of the Interconnection shall determine the simultaneous feasibility of all outstanding Financial Transmission Rights not offered for sale in the auction and of all Financial Transmission Rights that could be awarded in the auction for which bids were submitted. The winning bids shall be determined from an appropriate linear programming model that, while respecting transmission constraints and the maximum MW quantities of the bids and offers, selects 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. In the event that there are two or more identical bids for the selected Financial Transmission Rights and there are insufficient Financial Transmission Rights to accommodate all of the identical bids, then each such bidder will receive a pro rata share of the Financial Transmission Rights that can be awarded.

(c) Financial Transmission Rights shall be sold at the market-clearing price for Financial Transmission Rights between specified pairs of receipt and delivery points, as determined by the bid value of the marginal Financial Transmission Right that could not be awarded because it would not be simultaneously feasible. The linear programming model shall determine the clearing prices of all Financial Transmission Rights paths based on the bid value of the marginal Financial Transmission Rights, which are those Financial Transmission Rights with the highest bid values that could not be awarded fully because they were not simultaneously feasible, and based on the flow sensitivities of each Financial Transmission Rights path relative to the marginal Financial Transmission Rights paths flow sensitivities on the binding transmission constraints. Financial Transmission Rights with a zero clearing price will only be awarded if there is a minimum of one binding constraint in the auction period for which the Financial Transmission Rights path sensitivity is non-zero.

### **7.3.7 Announcement of Winners and Prices.**

Within two (2) Business Days after the close of the bid and offer period for an annual Financial Transmission Rights auction round, and within five (5) Business Days after the close of the bid and offer period for a monthly Financial Transmission Rights auction, the Office of the Interconnection shall post the winning bidders, the megawatt quantity, the term and the receipt and delivery points for each Financial Transmission Right awarded in the auction and the price at



which each Financial Transmission Right was awarded unless circumstances beyond PJM's control prevent PJM from meeting the applicable deadline. Under such circumstances, PJM will post the auction results at the earliest possible opportunity. The Office of the Interconnection shall not disclose the price specified in any bid to purchase or the reservation price specified in any offer to sell. If the Office of the Interconnection discovers an error in the results posted for a Financial Transmission Rights auction (or a given round of the annual Financial Transmission Rights auction), the Office of the Interconnection shall notify Market Participants of the error as soon as possible after it is found, but in no event later than 5:00 p.m. of the Business Day following the initial publication of the results of the auction or round of the annual auction. After this initial notification, if the Office of the Interconnection determines that it is necessary to post modified results, it shall provide notification of its intent to do so, together with all available supporting documentation, by no later than 5:00 p.m. of the second Business Day following the initial publication of the results of that auction or round of the annual auction. Thereafter, the Office of the Interconnection must post any corrected results by no later than 5:00 p.m. of the fourth calendar day following the initial publication of the results of the auction or round of the annual auction. Should any of the above deadlines pass without the associated action on the part of the Office of the Interconnection, the originally posted results will be considered final. Notwithstanding the foregoing, the deadlines set forth above shall not apply if the referenced auction results are under publicly noticed review by the FERC.

### **7.3.8 Auction Settlements.**

All buyers and sellers of Financial Transmission Rights between the same points of receipt and delivery shall pay PJMSettlement or be paid by PJMSettlement the market-clearing price, as determined in the auction, for such Financial Transmission Rights.

### **7.3.9 Liquidation of Financial Transmission Rights with Bilateral Transactions in the Event of Member Default.**

In the event a Member fails to meet creditworthiness requirements or make timely payments when due pursuant to the PJM Operating Agreement or PJM Tariff, the Office of the Interconnection shall, as soon as practicable after such default is declared, initiate the following procedures to close out and liquidate the Financial Transmission Rights of a Member:

a) The Office of the Interconnection shall close out the defaulting Member's positions as of the date of its default, by unilaterally accelerating and terminating all of the defaulting Member's rights with respect to forward Financial Transmission Rights positions.

b) Following the declaration of default, the Office of the Interconnection shall identify any positions in the defaulting Member's Financial Transmission Rights portfolio when declared in default that were obtained via a Financial Transmission Rights bilateral transaction for which the seller has provided indemnity pursuant to Operating Agreement, Schedule 1, section 5.2.2(d)(iv), and shall notify the seller that it has the right to assume certain bilaterally-traded Financial Transmission Right positions with terms commencing on the first day of the calendar month following such notification by the Office of Interconnection and assumption by seller as set forth below. For this purpose, the Financial Transmission Rights which the seller is eligible to assume

shall be all of those Financial Transmission Rights sold bilaterally by each seller to the defaulting Member which, in the most recent applicable auction for each Financial Transmission Right prior to the date of the Member's default declaration, or the most recent applicable auction for each Financial Transmission Right prior to the effective date of this provision, if later, would have cleared at a price lower than the original purchase price of the Financial Transmission Right. The seller's election must be to assume all or none of the bilaterally-traded positions in the defaulting Member's Financial Transmission Rights portfolio that the seller is eligible to assume per this criteria.

c) If the seller chooses to exercise its right in section 7.3.9(b), above, to assume the identified Financial Transmission Rights, the seller must notify the Office of the Interconnection of its exercise of such assumption right within 10 Business Days of the Office of the Interconnection notification to the seller of the bilaterally-traded positions the seller may elect to assume from the defaulting Member's Financial Transmission Rights portfolio. A seller opting to assume the identified bilaterally-traded Financial Transmission Right positions from the defaulting Member's Financial Transmission Rights portfolio must meet all credit requirements to assume such positions. If a seller elects to assume the identified bilaterally-traded positions and fulfills the applicable credit requirements, those positions will be transferred to the seller's Financial Transmission Rights portfolio on the first calendar day of the first month after the Office of the Interconnection receives the seller's notification of its election to assume the bilaterally-traded positions and has satisfied the applicable credit requirements.

d) If the seller chooses not to exercise its right in section 7.3.9(b), above, to assume the identified Financial Transmission Rights, the seller is still responsible for the indemnification of the bilaterally-traded positions in the defaulting Member's portfolio pursuant to Operating Agreement, Schedule 1, section 5.2.2(d)(iv).

be) The Office of the Interconnection shall post on its website all salient information relating to the closed out portfolio of Financial Transmission Rights.

ef) All current planning period Financial Transmission Right positions within the defaulting Members' Financial Transmission Right portfolio will be offered for sale in the next available monthly balance of planning period Financial Transmission Rights auction at an offer price designed to maximize the likelihood of liquidation of those positions.

dg) Financial Transmission Rights positions that do not settle until the next or subsequent planning period will be offered into the next available Financial Transmission Rights auction (taking into account timing constraints and the need for an orderly liquidation) where, based on the Office of Interconnection's commercially reasonable expectation, such positions would be expected to clear. In the event that the next scheduled Financial Transmission Rights auction is more than two (2) months subsequent to the date that the Office of the Interconnection declares a Member in default, a specially scheduled Financial Transmission Rights auction may be conducted by the Office of the Interconnection. The entire portfolio of the defaulting Member's Financial Transmission Rights will be offered for sale at an offer price designed to maximize the likelihood of liquidation of those positions.

**eh)** The Financial Transmission Right positions comprising the defaulting Member's portfolio that are liquidated in a Financial Transmission Rights auction should avoid setting the price in the auction at the bid prices with which they were initially submitted. In the event that any of the closed out Financial Transmission Rights would set market based on the auction's preliminary solution, then only one-half of each Financial Transmission Rights position will be offered for sale and the auction will be re-executed. In the event that any Financial Transmission Rights position that has been closed out once again sets price, then all Financial Transmission Rights scheduled to be liquidated will be removed from the affected auction and the auction will be re-executed excluding the closed out Financial Transmission Right positions. Financial Transmission Right positions that are not liquidated will then be offered in the next available auction or specially scheduled auction, as appropriate.

**fi)** The liquidation of the defaulting Members' Financial Transmission Rights portfolio pursuant to the foregoing procedures shall result in a final liquidated settlement amount. The final liquidated settlement amount will be included in calculating a Default Allocation Assessment as described in Section 15.1.2A(I) of the PJM Operating Agreement. If the Office of the Interconnection is unable to close out and liquidate a Financial Transmission Rights position under the foregoing procedures, the close out shall be deemed void and the defaulting Member shall remain liable for the full final value of its default, such full final value being realized at the normal time for performance of the Financial Transmission Rights position.

**gj)** *For the period of August 24, 2018 through November 30, 2018, the liquidation process of a defaulting Member's Financial Transmission Rights described in Tariff, Attachment K – Appendix, section 7.3.9(~~ef~~)-(~~fi~~) and the parallel provisions in Operating Agreement, Schedule 1, section 7.3.9(~~ef~~)-(~~fi~~) shall not apply, including, without limitation, that the Office of the Interconnection shall not be required to offer the defaulting Member's Financial Transmission Rights for sale into any auction. During this period, the amount of gain or loss on each of the defaulting Member's Financial Transmission Rights positions shall be realized at the normal time for performance of such Financial Transmission Rights position. The net of such gains and losses for all such positions shall be considered the final monthly settlement amount. Such final monthly settlement amount shall be included in calculating the Default Allocation Assessments as described in Operating Agreement, section 15.1.2A(I). Such assessment shall in no way relieve the defaulting Member of its obligations, including, without limitation, the defaulting Member's obligations arising from or associated with the full value of its default.*

In all other respects, Financial Transmission Rights terminated pursuant to this section shall be liquidated pursuant to the appropriate provisions and procedures set forth in the PJM Manuals.

# Attachment D

## Revisions to the PJM Operating Agreement

(Clean Format)

### **7.3 Auction Procedures.**

#### **7.3.1 Role of the Office of the Interconnection.**

Financial Transmission Rights auctions shall be conducted by the Office of the Interconnection in accordance with standards and procedures set forth in the PJM Manuals, such standards and procedures to be consistent with the requirements of this Schedule. PJMSettlement shall be the Counterparty to the purchases and sales of Financial Transmission Rights arising from such auctions, provided however, that PJMSettlement shall not be a contracting party to any subsequent bilateral transfers of Financial Transmission Rights between Market Participants. The conversion of an Auction Revenue Right to a Financial Transmission Right pursuant to this section 7 shall not constitute a purchase or sale transaction to which PJMSettlement is a contracting party. Financial Transmission Rights auctions conducted to liquidate a defaulting Members' Financial Transmission Rights portfolio shall be conducted by the Office of the Interconnection in accordance with the procedures set forth in the Section 7.3.9 herein and with the standards and procedures set forth in the PJM Manuals.

#### **7.3.2 Notice of Offer.**

A holder of a Financial Transmission Right wishing to offer the Financial Transmission Right for sale shall notify the Office of the Interconnection of any Financial Transmission Rights to be offered. Each Financial Transmission Right sold in an auction shall, at the end of the period for which the Financial Transmission Rights were auctioned, revert to the offering holder or the entity to which the offering holder has transferred such Financial Transmission Right, subject to the term of the Financial Transmission Right itself and to the right of such holder or transferee to offer the Financial Transmission Right in the next or any subsequent auction during the term of the Financial Transmission Right.

#### **7.3.3 Pending Applications for Firm Service.**

(a) [Reserved.]

(b) Financial Transmission Rights may be assigned to entities requesting Network Transmission Service or Firm Point-to-Point Transmission Service pursuant to Section 5.2.2 (e), only if such Financial Transmission Rights are simultaneously feasible with all outstanding Financial Transmission Rights, including Financial Transmission Rights effective for the then-current auction period. If an assignment of Financial Transmission Rights pursuant to a pending application for Network Transmission Service or Firm Point-to-Point Transmission Service cannot be completed prior to an auction, Financial Transmission Rights attributable to such transmission service shall not be assigned for the then-current auction period. If a Financial Transmission Right cannot be assigned for this reason, the applicant may withdraw its application, or request that the Financial Transmission Right be assigned effective with the start of the next auction period.

#### **7.3.4 On-Peak, Off-Peak and 24-Hour Periods.**

On-peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auction. On-Peak Financial Transmission Rights shall cover the periods from 7:00 a.m. up to the hour ending at 11:00 p.m. on Mondays through Fridays, except holidays as defined in the PJM Manuals. Off-Peak Financial Transmission Rights shall cover the periods from 11:00 p.m. up to the hour ending 7:00 a.m. on Mondays through Fridays and all hours on Saturdays, Sundays, and holidays as defined in the PJM Manuals. The 24-hour period shall cover the period from hour ending 1:00 a.m. to the hour ending 12:00 midnight on all days. Each bid shall specify whether it is for an on-peak, off-peak, or 24-hour period.

### **7.3.5 Offers and Bids.**

(a) Offers to sell and bids to purchase Financial Transmission Rights shall be submitted during the period set forth in Section 7.1.2, and shall be in the form specified by the Office of the Interconnection in accordance with the requirements set forth below.

(b) Offers to sell shall identify the specific Financial Transmission Right, by term, megawatt quantity and receipt and delivery points, offered for sale. An offer to sell a specified megawatt quantity of Financial Transmission Rights shall constitute an offer to sell a quantity of Financial Transmission Rights equal to or less than the specified quantity. An offer to sell may not specify a minimum quantity being offered. Each offer may specify a reservation price, below which the offeror does not wish to sell the Financial Transmission Right. Offers submitted by entities holding rights to Financial Transmission Rights shall be subject to such reasonable standards for the verification of the rights of the offeror as may be established by the Office of the Interconnection. Offers shall be subject to such reasonable standards for the creditworthiness of the offer or for the posting of security for performance as the Office of the Interconnection shall establish.

(c) Bids to purchase shall specify the term, megawatt quantity, price per megawatt, and receipt and delivery points of the Financial Transmission Right that the bidder wishes to purchase. A bid to purchase a specified megawatt quantity of Financial Transmission Rights shall constitute a bid to purchase a quantity of Financial Transmission Rights equal to or less than the specified quantity. A bid to purchase may not specify a minimum quantity that the bidder wishes to purchase. A bid may specify receipt and delivery points in accordance with Section 7.2.2 and may include Financial Transmission Rights for which the associated Transmission Congestion Credits may have negative values. Bids shall be subject to such reasonable standards for the creditworthiness of the bidder or for the posting of security for performance as the Office of the Interconnection shall establish.

(d) Bids and offers shall be specified to the nearest tenth of a megawatt and shall be greater than zero. The Office of the Interconnection may require that a market participant shall not submit in excess of 5000 bids and offers for any single monthly auction, or for any single round of the annual auction, when the Office of the Interconnection determines that such limit is required to avoid or mitigate significant system performance problems related to bid/offer volume. Notice of the need to impose such limit shall be provided prior to the start of the bidding period if possible. Where such notice is provided after the start of the bidding period,

market participants shall be required within one day to reduce their bids and offers for such auction below 5000, and the bidding period in such cases shall be extended by one day.

### **7.3.6 Determination of Winning Bids and Clearing Price.**

(a) At the close of each bidding period, the Office of the Interconnection will create a base Financial Transmission Rights power flow model that includes all outstanding Financial Transmission Rights that have been approved and confirmed for any portion of the month for which the auction was conducted and that were not offered for sale in the auction. The base Financial Transmission Rights model also will include estimated uncompensated parallel flows into each interface point of the PJM Region and estimated scheduled transmission outages.

(b) In accordance with the requirements of Section 7.5 of this Schedule and subject to all applicable transmission constraints and reliability requirements, the Office of the Interconnection shall determine the simultaneous feasibility of all outstanding Financial Transmission Rights not offered for sale in the auction and of all Financial Transmission Rights that could be awarded in the auction for which bids were submitted. The winning bids shall be determined from an appropriate linear programming model that, while respecting transmission constraints and the maximum MW quantities of the bids and offers, selects 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. In the event that there are two or more identical bids for the selected Financial Transmission Rights and there are insufficient Financial Transmission Rights to accommodate all of the identical bids, then each such bidder will receive a pro rata share of the Financial Transmission Rights that can be awarded.

(c) Financial Transmission Rights shall be sold at the market-clearing price for Financial Transmission Rights between specified pairs of receipt and delivery points, as determined by the bid value of the marginal Financial Transmission Right that could not be awarded because it would not be simultaneously feasible. The linear programming model shall determine the clearing prices of all Financial Transmission Rights paths based on the bid value of the marginal Financial Transmission Rights, which are those Financial Transmission Rights with the highest bid values that could not be awarded fully because they were not simultaneously feasible, and based on the flow sensitivities of each Financial Transmission Rights path relative to the marginal Financial Transmission Rights paths flow sensitivities on the binding transmission constraints. Financial Transmission Rights with a zero clearing price will only be awarded if there is a minimum of one binding constraint in the auction period for which the Financial Transmission Rights path sensitivity is non-zero.

### **7.3.7 Announcement of Winners and Prices.**

Within two (2) Business Days after the close of the bid and offer period for an annual Financial Transmission Rights auction round, and within five (5) Business Days after the close of the bid and offer period for a monthly Financial Transmission Rights auction, the Office of the Interconnection shall post the winning bidders, the megawatt quantity, the term and the receipt and delivery points for each Financial Transmission Right awarded in the auction and the price at

which each Financial Transmission Right was awarded unless circumstances beyond PJM's control prevent PJM from meeting the applicable deadline. Under such circumstances, PJM will post the auction results at the earliest possible opportunity. The Office of the Interconnection shall not disclose the price specified in any bid to purchase or the reservation price specified in any offer to sell. If the Office of the Interconnection discovers an error in the results posted for a Financial Transmission Rights auction (or a given round of the annual Financial Transmission Rights auction), the Office of the Interconnection shall notify Market Participants of the error as soon as possible after it is found, but in no event later than 5:00 p.m. of the Business Day following the initial publication of the results of the auction or round of the annual auction. After this initial notification, if the Office of the Interconnection determines that it is necessary to post modified results, it shall provide notification of its intent to do so, together with all available supporting documentation, by no later than 5:00 p.m. of the second Business Day following the initial publication of the results of that auction or round of the annual auction. Thereafter, the Office of the Interconnection must post any corrected results by no later than 5:00 p.m. of the fourth calendar day following the initial publication of the results of the auction or round of the annual auction. Should any of the above deadlines pass without the associated action on the part of the Office of the Interconnection, the originally posted results will be considered final. Notwithstanding the foregoing, the deadlines set forth above shall not apply if the referenced auction results are under publicly noticed review by the FERC.

### **7.3.8 Auction Settlements.**

All buyers and sellers of Financial Transmission Rights between the same points of receipt and delivery shall pay PJMSettlement or be paid by PJMSettlement the market-clearing price, as determined in the auction, for such Financial Transmission Rights.

### **7.3.9 Liquidation of Financial Transmission Rights with Bilateral Transactions in the Event of Member Default.**

In the event a Member fails to meet creditworthiness requirements or make timely payments when due pursuant to the PJM Operating Agreement or PJM Tariff, the Office of the Interconnection shall, as soon as practicable after such default is declared, initiate the following procedures to close out and liquidate the Financial Transmission Rights of a Member:

- a) The Office of the Interconnection shall close out the defaulting Member's positions as of the date of its default, by unilaterally accelerating and terminating all of the defaulting Member's rights with respect to forward Financial Transmission Rights positions.
- b) Following the declaration of default, the Office of the Interconnection shall identify any positions in the defaulting Member's Financial Transmission Rights portfolio when declared in default that were obtained via a Financial Transmission Rights bilateral transaction for which the seller has provided indemnity pursuant to Operating Agreement, Schedule 1, section 5.2.2(d)(iv), and shall notify the seller that it has the right to assume certain bilaterally-traded Financial Transmission Right positions with terms commencing on the first day of the calendar month following such notification by the Office of Interconnection and assumption by seller as set forth below. For this purpose, the Financial Transmission Rights which the seller is eligible to assume



shall be all of those Financial Transmission Rights sold bilaterally by each seller to the defaulting Member which, in the most recent applicable auction for each Financial Transmission Right prior to the date of the Member's default declaration, or the most recent applicable auction for each Financial Transmission Right prior to the effective date of this provision, if later, would have cleared at a price lower than the original purchase price of the Financial Transmission Right. The seller's election must be to assume all or none of the bilaterally-traded positions in the defaulting Member's Financial Transmission Rights portfolio that the seller is eligible to assume per this criteria.

c) If the seller chooses to exercise its right in section 7.3.9(b), above, to assume the identified Financial Transmission Rights, the seller must notify the Office of the Interconnection of its exercise of such assumption right within 10 Business Days of the Office of the Interconnection notification to the seller of the bilaterally-traded positions the seller may elect to assume from the defaulting Member's Financial Transmission Rights portfolio. A seller opting to assume the identified bilaterally-traded Financial Transmission Right positions from the defaulting Member's Financial Transmission Rights portfolio must meet all credit requirements to assume such positions. If a seller elects to assume the identified bilaterally-traded positions and fulfills the applicable credit requirements, those positions will be transferred to the seller's Financial Transmission Rights portfolio on the first calendar day of the first month after the Office of the Interconnection receives the seller's notification of its election to assume the bilaterally-traded positions and has satisfied the applicable credit requirements.

d) If the seller chooses not to exercise its right in section 7.3.9(b), above, to assume the identified Financial Transmission Rights, the seller is still responsible for the indemnification of the bilaterally-traded positions in the defaulting Member's portfolio pursuant to Operating Agreement, Schedule 1, section 5.2.2(d)(iv).

e) The Office of the Interconnection shall post on its website all salient information relating to the closed out portfolio of Financial Transmission Rights.

f) All current planning period Financial Transmission Right positions within the defaulting Members' Financial Transmission Right portfolio will be offered for sale in the next available monthly balance of planning period Financial Transmission Rights auction at an offer price designed to maximize the likelihood of liquidation of those positions.

g) Financial Transmission Rights positions that do not settle until the next or subsequent planning period will be offered into the next available Financial Transmission Rights auction (taking into account timing constraints and the need for an orderly liquidation) where, based on the Office of Interconnection's commercially reasonable expectation, such positions would be expected to clear. In the event that the next scheduled Financial Transmission Rights auction is more than two (2) months subsequent to the date that the Office of the Interconnection declares a Member in default, a specially scheduled Financial Transmission Rights auction may be conducted by the Office of the Interconnection. The entire portfolio of the defaulting Member's Financial Transmission Rights will be offered for sale at an offer price designed to maximize the likelihood of liquidation of those positions.

h) The Financial Transmission Right positions comprising the defaulting Member's portfolio that are liquidated in a Financial Transmission Rights auction should avoid setting the price in the auction at the bid prices with which they were initially submitted. In the event that any of the closed out Financial Transmission Rights would set market based on the auction's preliminary solution, then only one-half of each Financial Transmission Rights position will be offered for sale and the auction will be re-executed. In the event that any Financial Transmission Rights position that has been closed out once again sets price, then all Financial Transmission Rights scheduled to be liquidated will be removed from the affected auction and the auction will be re-executed excluding the closed out Financial Transmission Right positions. Financial Transmission Right positions that are not liquidated will then be offered in the next available auction or specially scheduled auction, as appropriate.

i) The liquidation of the defaulting Members' Financial Transmission Rights portfolio pursuant to the foregoing procedures shall result in a final liquidated settlement amount. The final liquidated settlement amount will be included in calculating a Default Allocation Assessment as described in Section 15.1.2A(I) of the PJM Operating Agreement. If the Office of the Interconnection is unable to close out and liquidate a Financial Transmission Rights position under the foregoing procedures, the close out shall be deemed void and the defaulting Member shall remain liable for the full final value of its default, such full final value being realized at the normal time for performance of the Financial Transmission Rights position.

*j) For the period of August 24, 2018 through November 30, 2018, the liquidation process of a defaulting Member's Financial Transmission Rights described in Tariff, Attachment K – Appendix, section 7.3.9(f)-(i) and the parallel provisions in Operating Agreement, Schedule 1, section 7.3.9(f)-(i) shall not apply, including, without limitation, that the Office of the Interconnection shall not be required to offer the defaulting Member's Financial Transmission Rights for sale into any auction. During this period, the amount of gain or loss on each of the defaulting Member's Financial Transmission Rights positions shall be realized at the normal time for performance of such Financial Transmission Rights position. The net of such gains and losses for all such positions shall be considered the final monthly settlement amount. Such final monthly settlement amount shall be included in calculating the Default Allocation Assessments as described in Operating Agreement, section 15.1.2A(I). Such assessment shall in no way relieve the defaulting Member of its obligations, including, without limitation, the defaulting Member's obligations arising from or associated with the full value of its default.*

In all other respects, Financial Transmission Rights terminated pursuant to this section shall be liquidated pursuant to the appropriate provisions and procedures set forth in the PJM Manuals.