

ATTACHMENT Q

PJM CREDIT POLICY

C. Financial Transmission Right Auctions

Credit requirements described herein for FTR activity are applied separately for each customer account of a Market Participant. FTR Participants must designate the appropriate amount of credit to each separate customer account in which any activity occurs or will occur.

1. FTR Credit Limit.

Participants must maintain their FTR Credit Limit at a level equal to or greater than their FTR Credit Requirement for each applicable account. FTR Credit Limits will be established only by a Participant providing Collateral and designating the available credit to specific accounts.

2. FTR Credit Requirement.

For each Market Participant with FTR activity, PJMSettlement shall calculate an FTR Credit Requirement. The FTR Credit Requirement shall be based on FTR cost less the FTR Historical Value, but shall be no less than ten cents (10¢) per-MWh, as further described below. FTR Historical Values shall be calculated separately for on-peak, off-peak, and 24-hour FTRs for each month of the year. FTR Historical Values shall be adjusted by plus or minus ten percent for cleared counter flow or prevailing flow FTRs, respectively, in order to mitigate exposure due to uncertainty and fluctuations in actual FTR value. Historical values used in the calculation of FTR Historical Values shall be adjusted when the network simulation model utilized in PJM's economic planning process indicates that transmission congestion will decrease due to certain transmission upgrades that are in effect or planned to go into effect for the following Planning Period. The transmission upgrades to be modeled for this purpose shall only include those upgrades that, individually, or together, have 10% or more impact on the transmission congestion on an individual constraint or constraints with congestion of \$5 million or more affecting a common congestion path. The adjustments to historical values shall be the dollar amount of the adjustment shown in the network simulation model. If FTR cost less the FTR Historical Value, plus any applicable increase related to portfolio diversification as described in section C.6 below, results in a value that is less than ten cents (10¢) per MWh, the FTR Credit Requirement shall be increased to ten cents (10¢) per MWh. FTR Credit Requirements shall be further adjusted by ARR credits available and by an amount based on portfolio diversification, if applicable. The requirement will be based on individual monthly exposures which are then used to derive a total requirement.

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

applicable, the FTR Credit Requirement shall be the sum of the individual positive monthly subtotals, representing months in which net payments to PJMSettlement are expected.

3. Rejection of FTR Bids.

Bids submitted into an auction will be rejected if the Market Participant's FTR Credit Requirement including such submitted bids would exceed the Market Participant's FTR Credit Limit, or if the Market Participant fails to establish additional credit as required pursuant to provisions related to portfolio diversification.

4. FTR Credit Collateral Returns.

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

5. Credit Responsibility for Bilateral Transfers of FTRs.

PJMSettlement may require that credit responsibility associated with an FTR bilaterally transferred to a new Market Participant remain with the original party (which for these purposes, means the party bearing credit responsibility for the FTR immediately prior to bilateral transfer) unless and until the receiving party independently establishes, consistent with this Attachment Q, sufficient credit with PJMSettlement and agrees through confirmation of the bilateral transfer in PJM's FTR reporting tool that it will meet in full the credit requirements associated with the transferred FTR.

6. Portfolio Diversification.

Portfolio diversification shall be calculated, and the appropriate provisions herein applied, separately for each customer account of a Market Participant, and separately for each month.

Subsequent to calculating a tentative cleared solution for an FTR auction (or auction round), PJM shall determine the FTR Portfolio Auction Value for each customer account of a Market Participant, including the tentative cleared solution. Any customer accounts with such FTR Portfolio Auction Values that are negative in one or more months shall be deemed "FTR Flow Undiversified".

For customer accounts that are FTR Flow Undiversified in a month, PJMSettlement shall increment the FTR Credit Requirement by an amount equal to three times the absolute value of the FTR Portfolio Auction Value in that month, including the tentative cleared solution. For portfolios that are FTR Flow Undiversified in months subsequent to the current planning year, these incremental amounts, calculated on a monthly basis, shall be reduced (but not below zero) by an amount up to 25% of the monthly value of ARR credits that are held by a Market Participant. Subsequent to the ARR allocation process preceding an annual FTR auction, such ARRs credits shall be reduced to zero for months associated with that ARR allocation process.

PJMSettlement may recalculate such ARR credits at any time, but at a minimum shall do so subsequent to each annual FTR auction. If a reduction in such ARR credits at any time increases a Market Participant's FTR Credit Requirements beyond its credit available for FTR activity, the Market Participant must increase its credit to eliminate the shortfall in the applicable customer account(s).

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

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

7. FTR Administrative Charge Credit Requirement

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

8. Long-Term FTR Credit Recalculation

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

Effective only for the FTR Historical Value update performed in 2018 for FTR Credit Requirement calculations, Market Participants will be granted a one-time transition period of no longer than 13 months in duration, during which they may remedy any credit shortfall arising from the 2018 historical value update. The transition period shall commence upon implementation of the 2018 FTR Historical Value update, and shall expire upon implementation of the 2019 FTR Historical Value update. During this transition period, a shortfall in FTR credit allocation by a Market Participant shall not be an event of default. However, failure to remedy the shortfall by the expiration of the transition period shall be an event of default. During such transition period, Market Participants with a credit shortfall shall be restricted in all of their credit-screened transactions. Specifically, such Market Participants may not engage in any Virtual Transactions or Export Transactions, or participate in RPM Auctions or other RPM activity, and may only participate in FTR Auctions or engage in FTR trading activities that reduce credit requirements. PJM shall not return any Collateral to such Market Participants until their credit shortfall is remedied. Market Participants shall allocate any excess or unallocated Collateral to any account(s) of such Market Participant in which there is a credit shortfall during

the transition period. Market Participants may remedy their credit shortfall at any time through provision of sufficient Collateral.

9. FTR Credit Recalculation to Implement the Minimum Per-MWh Requirement

Effective only for the initial implementation of the ten cent (10¢) per-MWh minimum FTR Credit Requirement, Market Participants will be granted a one-time transition period during which they may remedy any credit shortfall arising therefrom. The transition period shall commence upon implementation of the minimum per-MWh Requirement, and shall expire upon implementation of the 2019 FTR Historical Value update. During this transition period, a shortfall in FTR credit allocation by a Market Participant shall not be an event of default. However, until such shortfall is remedied, Market Participants with a credit shortfall shall be restricted in all of their credit-screened transactions. Specifically, such Market Participants may not engage in any Virtual Transactions or Export Transactions, or participate in RPM Auctions or other RPM activity. Such Market Participants may engage only in the selling of open FTR positions in FTR auctions, provided such sales would reduce the Market Participants' FTR Credit Requirements. PJM shall not return any Collateral to such Market Participants until their credit shortfall is remedied. Market Participants shall allocate any excess or unallocated Collateral to any account(s) of such Market Participant in which there is a credit shortfall. Market Participants may remedy their credit shortfall at any time through provision of sufficient Collateral.

Relevant Definitions (for reference only)

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

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

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

FTR Historical Value: FTR Historical Value:

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

FTR Monthly Credit Requirement Contribution: For each FTR for each month, "FTR Monthly Credit Requirement Contribution" shall mean the total FTR cost for the month, prorated on a daily basis, less the FTR Historical Value for the month. For cleared FTRs, this contribution may be negative; prior to clearing, FTRs with negative contribution shall be deemed to have zero contribution.

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

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

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