

**UP-TO CONGESTION CREDIT REQUIREMENTS REVISIONS
FOR POSTING FOR MRC 5/30/2013**

Redlines indicate changes related to the Up-to Congestion definition filed separately

Highlighted redlines indicate further changes for Up-to Congestion credit requirements

Deletions are shown for both the Up-to Congestion definition filing and the Up-to Congestion credit requirements, but the two are not distinguished

(For Reference Only: below are some additional definitions that have been added to Attachment K that are relevant to Attachment Q)

ATTACHMENT K-APPENDIX

1.3.38.01 Up-to Congestion Transaction.

“Up-to Congestion Transaction” shall have the meaning specified in Section 1.10.1A of this Schedule.

1.3.38B Virtual Transaction.

“Virtual Transaction” shall mean a Decrement Bid, Increment Offer and/or Up-to Congestion Transaction.

...

1.10.1A Day-ahead Energy Market Scheduling.

...

(c-1) A Market Participant may elect to submit in the Day-ahead Energy Market a form of Virtual Transaction that combines an offer to sell energy at a source, with a bid to buy the same megawatt quantity of energy at a sink where such transaction specifies the maximum difference between the Locational Marginal Prices at the source and sink. ... A Virtual Transaction of this type is referred to as an “Up-to Congestion Transaction.” ...

ATTACHMENT Q
PJM CREDIT POLICY

...

Ia. MINIMUM PARTICIPATION REQUIREMENTS

...

B. Capitalization

In addition to the Annual Certification requirements in Appendix 1 to this Attachment Q, a Participant must demonstrate that it meets the minimum financial requirements appropriate for the PJM market(s) in which it transacts by satisfying either the Minimum Capitalization or the Provision of Collateral requirements listed below:

...

2. Provision of Collateral

If a Participant does not demonstrate compliance with its applicable Minimum Capitalization Requirements above, it may still qualify to participate in PJM's markets by posting additional collateral, subject to the terms and conditions set forth herein.

Any collateral provided by a Participant unable to satisfy the Minimum Capitalization Requirements above will be restricted in the following manner:

- i. Collateral provided by FTR Participants shall be reduced by \$500,000 and then further reduced by 10%. This reduced amount shall be considered the Financial Security provided by the Participant and available to satisfy requirements of this Credit Policy.
- ii. Collateral provided by other Participants that engage in **Virtual Transactions**~~Increment Offers and Decrement Bids~~**virtual bidding** shall be reduced by \$200,000 and then further reduced by 10%. This reduced value shall be considered Financial Security available to satisfy requirements of this Credit Policy.
- iii. Collateral provided by other Participants that do not engage in ~~virtual bidding~~**Virtual Transactions** shall be reduced by 10%, and this reduced value shall be considered Financial Security available to satisfy requirements of this Credit Policy.

In the event a Participant that satisfies the Minimum Participation Requirements through provision of collateral also provides a Corporate Guaranty to increase its available credit, then the Participant's resulting Unsecured Credit Allowance conveyed through such Guaranty shall be the lesser of:

(1) the applicable Unsecured Credit Allowance available to the Participant by the Corporate Guaranty pursuant to the creditworthiness provisions of this credit policy, or,

(2) the face value of the Guaranty, reduced by 10%.

...

III. ~~VIRTUAL TRANSACTION VIRTUAL BID INCREMENT OFFER AND DECREMENT BID~~ SCREENING

A. Credit and Financial Security

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

If a Participant chooses to provide additional Financial Security in order to increase its **Credit Available for ~~Virtual Bidding~~ ~~Virtual Transactions~~ ~~Increment Offers and Decrement Bids~~** PJMSettlement may establish a reasonable timeframe, not to exceed three months, for which such Financial Security must be maintained. PJMSettlement will not impose such restriction on a deposit unless a Participant is notified prior to making the deposit. Such restriction, if applied, shall be applied to all future deposits by all ~~Participants engaging in virtual bidding~~ ~~Virtual Transactions~~ ~~Increment Offers and Decrement Bids~~ ~~participants~~.

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

B. ~~Virtual Bid~~ Virtual Transactions Increment Offer and Decrement Bid Screening Process

All ~~virtual bids~~ Virtual Transactions Increment Offers and Decrement Bids submitted to PJM shall be subject to a credit screen prior to acceptance in the Day-ahead Energy Market auction. The credit screen process will automatically reject ~~Virtual Transactions Increment Offers and Decrement Bids~~ virtual bids and offers submitted by the PJM market participant if the participant's Credit Available for ~~Virtual Transactions Increment Offers and Decrement Bids~~ Virtual Bidding is exceeded by the **Virtual Credit Exposure** that is calculated based on the participant's submitted ~~Virtual Transactions~~ bids and offers as described below.

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

Virtual Credit Exposure = ~~INC and DEC Exposure + Up-to Congestion Exposure~~

Where:

1) ~~INC and DEC Exposure is calculated as~~ the lesser of:

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

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

~~2) Up-to Congestion Exposure is calculated as:~~

~~Total MWH bid hourly for each Up-to Congestion Transaction x (price bid – Up-to Congestion Reference Price) summed over all Up-to Congestion Transactions and all hours + Total MWH cleared hourly for each Up-to Congestion Transaction x (cleared price – Up-to Congestion Reference Price) summed over all Up-to Congestion Transactions and all hours for the previous three cleared day-ahead markets.~~

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

If a Market Participant's ~~Virtual Transactions Increment Offers and Decrement Bids~~ virtual bids are rejected as a result of the credit screen process, the Market Participant will be notified via an

eMKT error message. A Market Participant whose Virtual Transactions Increment Offers and Decrement Bids virtual bids are rejected may alter its Virtual Transactions Increment Offers and Decrement Bids virtual bids and offers so that its Virtual Credit Exposure does not exceed its Credit Available for Virtual Transactions Increment Offers and Decrement Bids Virtual Bidding, and may resubmit them. Virtual Transactions Bids may be submitted in one or more groups during a day. If one or more groups of Virtual T bids ransactions is submitted and accepted, and a subsequent group of submitted Virtual T bids ransactions causes the total submitted Virtual T bids ransactions to exceed the Virtual Credit Exposure, then only that subsequent set of Virtual T bids ransactions will be rejected. Previously accepted Virtual T bids ransactions will not be affected, though the Market Participant may choose to withdraw them voluntarily.

...

VIII. DEFINITIONS:

...

Credit Available for Virtual Transactions Increment Offers and Decrement Bids Virtual Bidding

Credit Available for Virtual Transactions Increment Offers and Decrement Bids Virtual Bidding is a Participant's Working Credit Limit, less its Total Net Obligation.

...

Up-to Congestion Counterflow Transaction

An Up-to Congestion Transaction will be deemed an Up-to Congestion Counterflow Transaction if the following value is negative: (a) when bidding, the lower of the bid price and the prior Up-to Congestion Historical Month's average real-time value for the transaction; or (b) for cleared Virtual Transactions, the cleared day-ahead price of the Virtual Transaction.

Up-to Congestion Prevailing Flow Transaction

An Up-to Congestion Transaction will be deemed an Up-to Congestion Prevailing Flow Transaction if it is not an Up-to Congestion Counterflow Transaction.

Up-to Congestion Reference Price

The Up-to Congestion Reference Price for an Up-to Congestion Transaction is the specified percentile price differential between source and sink (defined as sink price minus source price) for hourly real-time prices experienced over the prior Up-to Congestion Historical Month, averaged with the same percentile value calculated for the second prior Up-to Congestion Historical Month. Up-to Congestion Reference Prices shall be calculated using the following specified historical percentiles:

For Up-to Congestion Prevailing Flow Transactions: 30th percentile

For Up-to Congestion Counterflow Transactions when bid: 20th percentile

For Up-to Congestion Counterflow Transactions when cleared: 5th percentile.

Up-to Congestion Historical Month

An Up-to Congestion Historical Month is a consistently-defined historical period nominally one month long that is as close to a calendar month as PJM determines is practical.

...

Virtual Transactions Increment Offer and Decrement Bid Screening

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

...

Uncleared Bid Exposure

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

...

...