

Implementation of Enhanced Credit Requirements for Virtual Transactions

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April 22, 2009

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Approved Proposal Summary

Proposal History

- ◆ Proposal Approved
 - September 19, 2008 – MIWG
 - October 22, 2008 – Business Issues Committee
 - October 29, 2008 – Management Committee
 - November 17, 2008 – Board of Directors
- ◆ Filed with FERC April 17, 2009

Approved Proposal

- ◆ NYISO will distinguish between Virtual Load and Virtual Supply credit requirements
- ◆ NYISO will take seasonal differences into account in defining credit requirements since these differences are sufficiently pronounced
- ◆ NYISO will group zones with similar risk characteristics when defining credit requirements
- ◆ NYISO will define credit requirements for times-of-day with similar risk characteristics for Virtual Supply
- ◆ NYISO does not need to define credit requirements for all of the times-of-day groupings for Virtual Load

Approved Requirements

- ◆ Adopt statistically valid groupings at the 97th percentile
 - Virtual Supply – 72 separate values
 - 24 in the summer
 - 24 in the winter
 - 24 in the shoulder months
 - Virtual Demand – 30 separate values
 - 16 in the summer
 - 8 in the winter
 - 6 in the shoulder months
- ◆ Establish each Market Participant's credit requirement for virtual bids by multiplying the number of MWhs per bid by the relevant price differential for Virtual Demand or Virtual Supply

Approved Requirements – Cont.

- ◆ Set Market Participant’s credit limit for virtual bidding in dollars, rather than MWhs
- ◆ Recalculate and update price differentials for bidding Virtual Demand and Virtual Supply on a monthly basis
 - Each month, the data for the previous month will be added to the existing data set for purposes of recalculating and updating price differentials
 - No data will be deleted from the existing data set

Benefits

- ◆ Credit requirements more appropriately matched to risk based on historical virtual bidding behavior
- ◆ Elimination of 2-day multiplier
- ◆ Evaluation of available credit balance at key intervals throughout the day
- ◆ Only validated or cleared bids result in credit reductions
- ◆ Potential to administer more timely margin calls

Implementation

Impacts on Credit Requirement

- ◆ Bidding limit will be based on dollar amount instead of MWhs
 - Market Participants will continue to bid in MWhs; daily MWh limit will be lifted
 - Credit requirement for bids will be calculated based on approved Virtual Supply (72) and Virtual Load (30) groupings
 - Virtual Transaction Component will equal (i) the sum of the Market Participant's Virtual Supply and Virtual Load credit requirements for bids that have not yet settled plus (ii) any unpaid net loss on Virtual Transactions
 - Credit requirements for Virtual Supply and Virtual Load bids for the same day, hour, and zone will offset as follows:
 - Upon submittal of bids – credit requirement for offsetting bid positions will equal the greater of the Virtual Supply credit requirement or the Virtual Load credit requirement
 - Upon acceptance of bids – the credit requirement will be based upon the net position (e.g., VS of 10 MWh and VL of 15 MWh are accepted – credit requirement would be based on VL of 5 MWh)

Impacts on Credit Requirement

- All future bids (including submitted and scheduled) will be assessed for credit and will reduce the amount of credit available for Virtual Transactions
 - Any unpaid net losses will reduce the amount credit available of Virtual Transactions
 - Total Virtual Transaction credit requirement will be deducted from credit allocated to Virtual Transaction market
- ◆ Credit position will be calculated on a near real-time basis
- Overall Collateral Exposure Estimation
 - Actual Loss Ratio Calculations

Impacts on Credit Requirement

- ◆ Credit Requirement Calculation Triggers
 - Batch transactions to be executed throughout the day*
 - Credit check incorporated into DAM Closing process*
 - Daily bill post losses ratio check
 - End of day losses calculation
 - Updated price deltas
 - Calculated on the 3rd of the month
 - Posted on the NYISO.com website

****Insufficient credit will result in rejection of all Market Participant bids included in transaction batch***

CBM UI Changes

- ◆ Removal of Credit Information from Bid Pages
 - Virtual MWh Sum for All Zones
 - Virtual MWh Limit for All Zones
- ◆ Removal of Credit Information from Organization Details pages
 - Virtual Bid Collateral Amount
 - Virtual Bid Credit (MWh) Limit
- ◆ Removal of Credit Check Download

Bid Submittal Status/ Message

Bid Status	Bid Message	Action
Validation Passed	Validation Passed Subject to Credit Evaluation	Bid passed validation pending credit approval
Validation Passed	Credit Evaluation Processing	Credit Check is in progress
Validation Failed	Validation Failed Due to Insufficient Credit	Failed Credit Check; bid released
Validation Passed	<i>None</i>	Credit check is complete
Evaluating	<i>n/a</i>	SCUC evaluation in progress
Bid Accepted	<i>n/a</i>	Accepted by SCUC; credit held
Bid Rejected	<i>n/a</i>	Rejected by SCUC; credit released

Margin Call Process

- ◆ Consistent with current process
 - Where net losses are between 25% and 49.99% of Market Participant's posted credit support an e-mail notice will be sent to 24*7 Virtual Market contact
 - Where net losses are between 50% and 99.99% of Market Participant's posted credit support and:
 - Next Day a Business Day
 - Notification e-mail that a margin call is being executed
 - Next Day Not a Business Day
 - Notification stating the Market Participant has been suspended from Virtual Transaction market
 - System will suspend Market Participant participation in Virtual Transaction market

Margin Call Process

- Where losses are greater than or equal to 100% of Market Participant's posted credit support
 - Notification stating the Market Participant has been suspended from the Virtual Transaction market
 - System will suspend Market Participant participation in Virtual Transaction market

- In each case, the NYISO credit department will typically call the 24*7 contact as well

Market Suspension

- ◆ System will change the bid status of all bids that meet all of the characteristics listed below from “Validation Passed” to “Validation Failed”:
 - Bid is associated with a Virtual Supply or Virtual Load bus
 - Bid (via the Virtual Supply or Virtual Load bus) is associated with the suspended billing organization
 - Bid’s bid status is “Validation Passed”
 - Bid has not yet been evaluated by SCUC
- ◆ System will assign a bid message of “Billing Organization Suspended from Virtual Markets” and will prevent the Market Participant from submitting any additional Virtual Transaction bids
- ◆ Market Participant will receive an error message if suspended but attempts to bid

Proposed Schedule

- ◆ June 2009 – Market Participant Market Trials
 - Detailed discussion planned for May MIWG

- ◆ June 2009 – Effective with CMS Phase 2 deployment

Draft – For Discussion Purposes Only



The New York Independent System Operator (NYISO) is a not-for-profit corporation that began operations in 1999. The NYISO operates New York's bulk electricity grid, administers the state's wholesale electricity markets, and provides comprehensive reliability planning for the state's bulk electricity system.

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