

# **Proposed Revisions to the Credit Requirements for Virtual Transactions Market**

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Billing Issues Committee  
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# Outline

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- ◆ Overview
- ◆ Recap of current credit requirements in the Virtual Transactions market
- ◆ Areas identified for improvement
- ◆ Proposal
- ◆ Impact of proposed changes on price deltas
- ◆ Shortening timeframes to suspend a Virtual Trader

# Overview

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- ♦ NYISO discussed potential changes to the Virtual Transactions Credit Requirements at the:

October 13, 2006 S&PWG

October 31, 2006 S&PWG

January 22, 2006 MIWG

February 5, 2006 MIWG

- ♦ The current proposal is a refinement based on the results of the above meetings
- ♦ MPs are generally in favor of this refined proposal.

# Current Credit Requirements

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- ◆ Credit requirements for Virtual Transactions as currently established in the NYISO's tariffs.
- ◆ Credit Requirement Calculation:  
*(Daily Trading Limit in MWWhs) x (Price per MWh) x (Factor of 2)*
- ◆ Daily Trading Limit is indicated by the customer, subject to availability of adequate credit.
- ◆ Price per MWh is determined based on the difference between the Day-Ahead and Real-Time energy prices over the previous ninety days at the 97<sup>th</sup> percentile.

## Example:

Customer A desires to trade 1,000 MWWhs daily.

Credit requirement (as of 1/1/2007) =  $1,000 \text{ MWWhs} \times \$70 \times 2 = \$140,000$

# Areas Identified for Improvement

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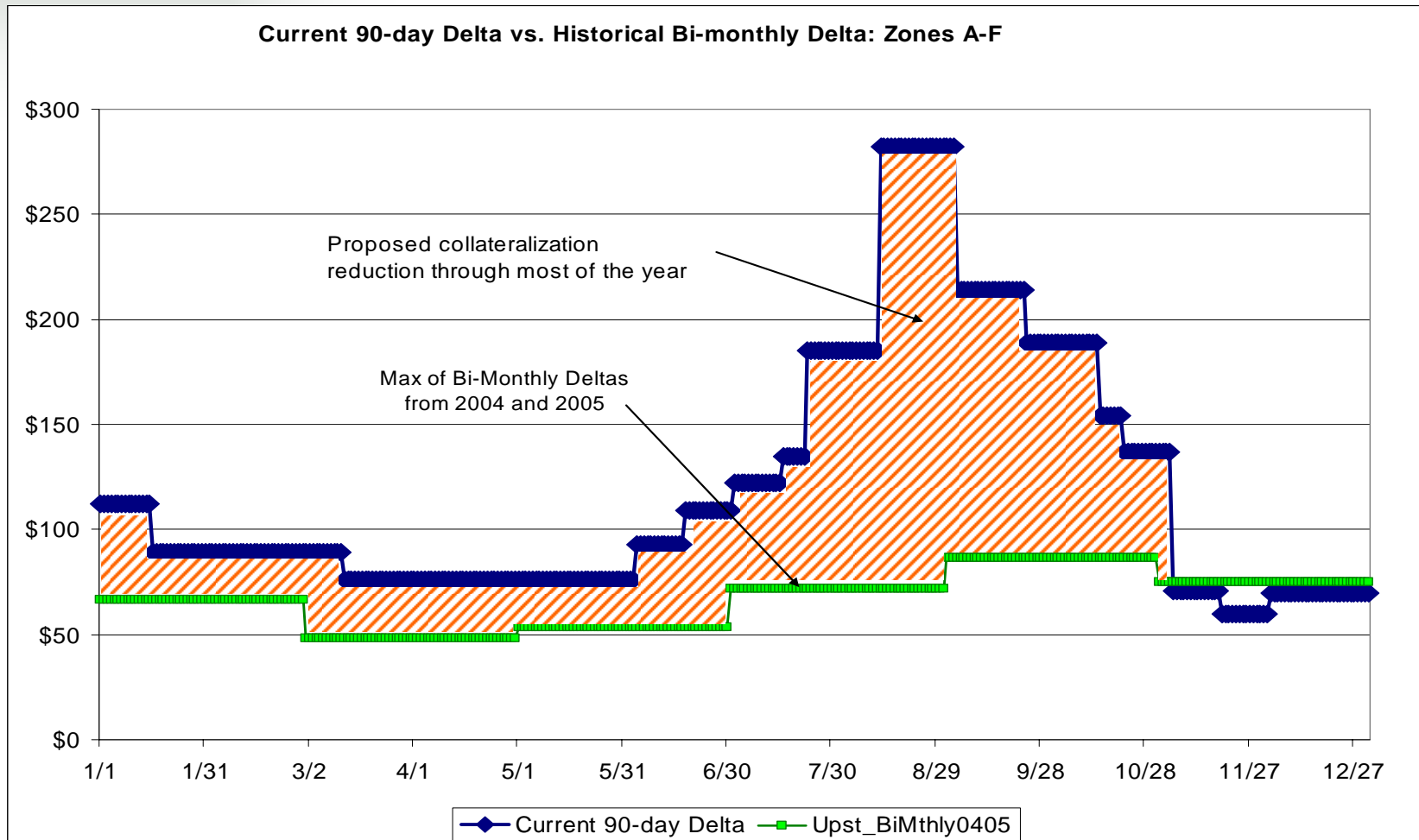
- ♦ Virtual Traders can incur market losses that exceed collateral, generally due to unexpected market events.
- ♦ For a thinly-capitalized Virtual Trader, the risk that a market loss exceeding its credit will result in a bad debt loss is much higher than for well-capitalized Virtual Traders because the NYISO has a much better chance of successful recovery from a well-capitalized entity.
- ♦ The 90-day rolling calculation of the price differential used to establish Virtual Transactions credit requirements lags behind seasonal changes (i.e., the price per MWh can be higher than necessary in shoulder periods and lower than necessary in peak periods).
- ♦ The current time period to suspend the bidding privileges of a Virtual Trader who has exceeded its established credit creates potential exposure which could be mitigated by a shorter suspension period.
- ♦ Statistically, trading Virtual Supply is more risky than trading Virtual Load. This fact is not reflected in the current credit requirements.

# Proposal

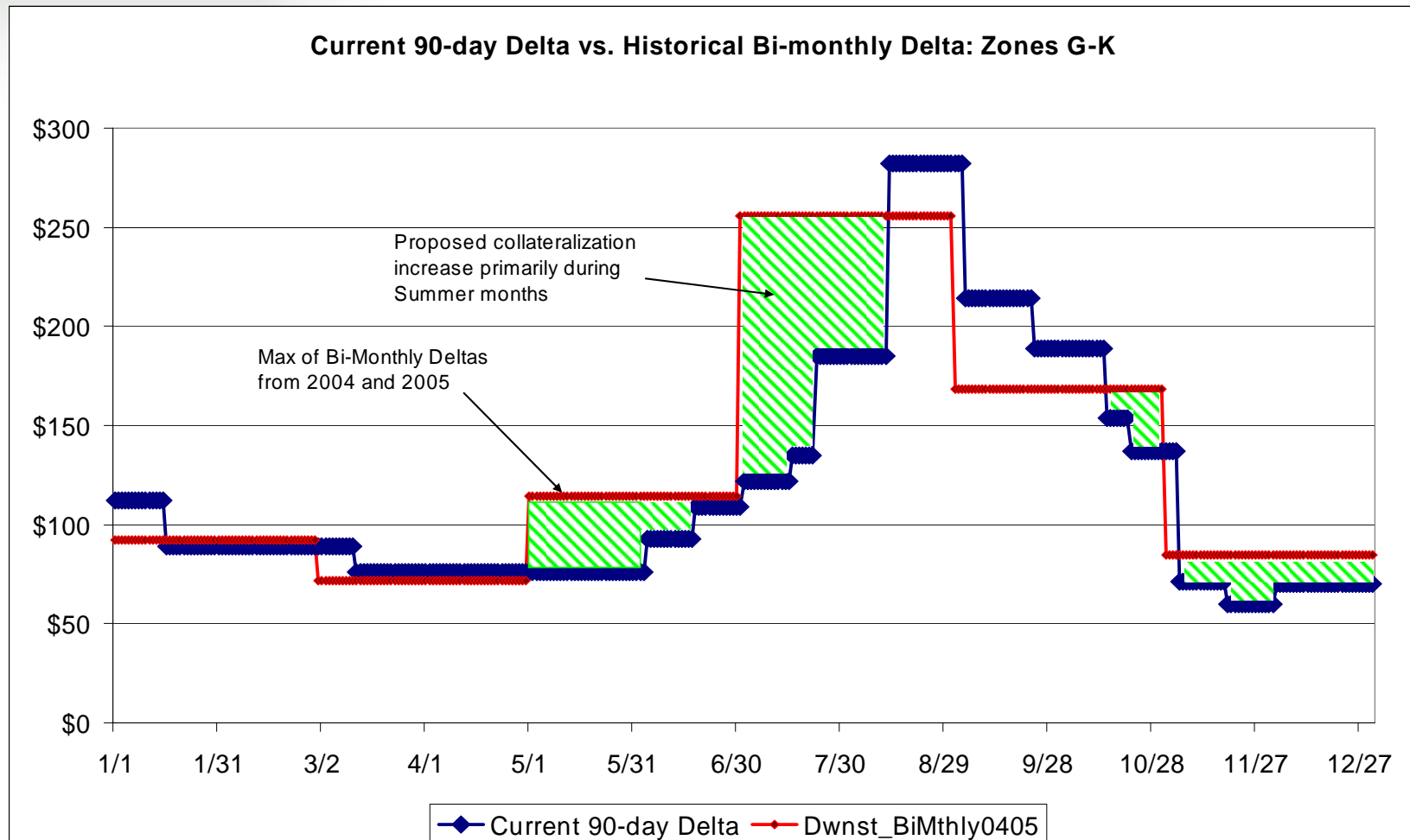
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- ♦ Based upon MP feedback and NYISO analysis of market characteristics and MP bidding behavior, NYISO staff recommends the following refined proposal:
    - Replace the 90-day rolling with a seasonally adjusted calculation based on the higher of the maximum price differential calculated at the 97<sup>th</sup> percentile from the two prior year equivalent periods.
      - Divide the year into (6) two-month intervals [January-February, March-April, May-June, July-August, September-October, November-December] and extract the higher of the maximum price differential at the 97<sup>th</sup> percentile from the two prior year equivalent periods.
- Note: MPs at the February 5<sup>th</sup> MIWG meeting requested further analysis to determine if using a 15-day rolling distribution had incremental predictive value over the base case discussed above, and consequently should be included as a component in the credit calculation. The analysis showed including the rolling differential did not produce any statistically significant improvement in the correlation coefficient, therefore NYISO staff recommends it should not be included.*
- Determine price differentials separately for trading in each of the 11 virtual trading zones.
  - An MP's overall collateral requirement will be based upon the highest price differential in any zone in which that particular MP has elected to trade.
  - Suspension timeframes for Customers that have eroded available credit support would be shortened.

# Impact Of Proposed Changes On Price Deltas



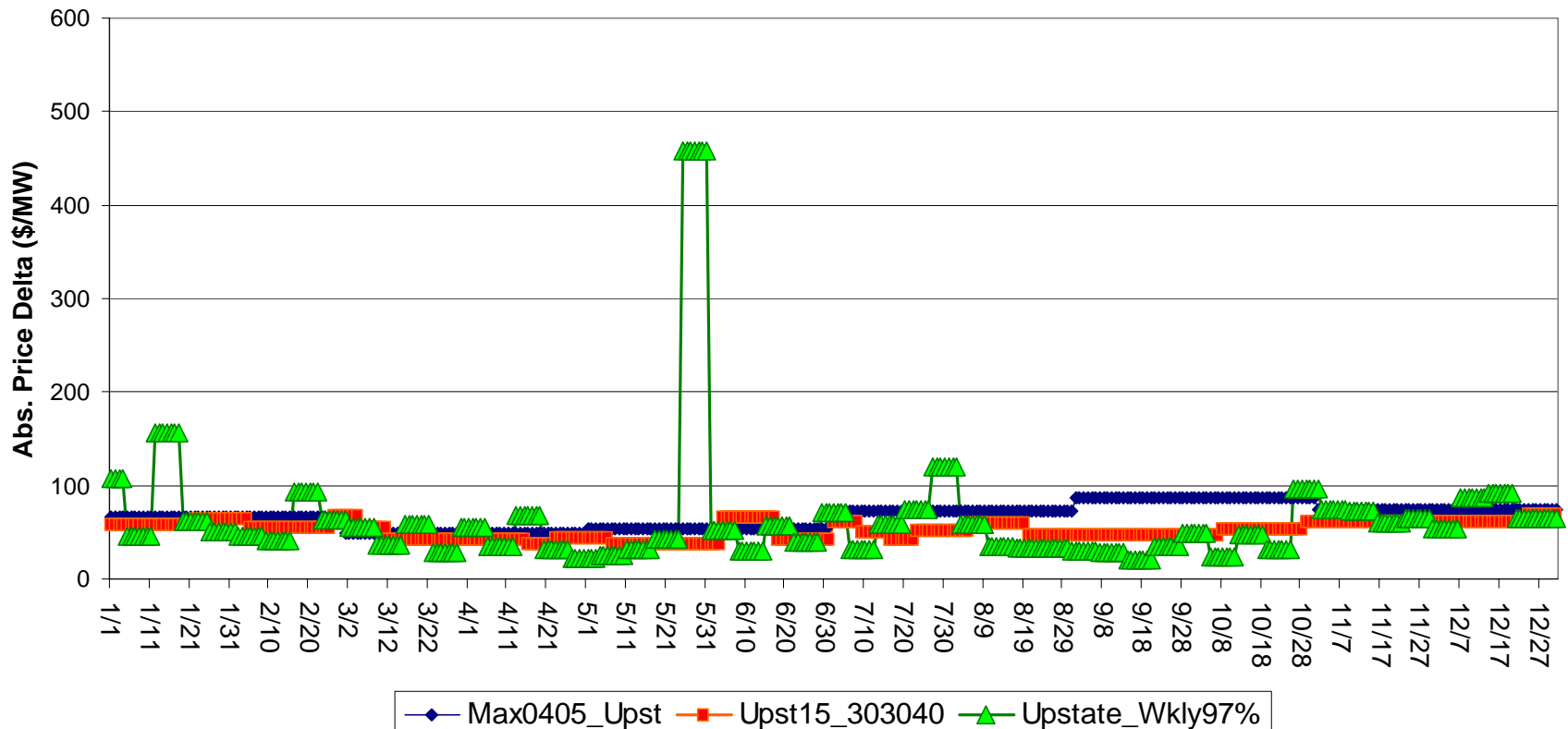
# Impact Of Proposed Changes On Price Deltas





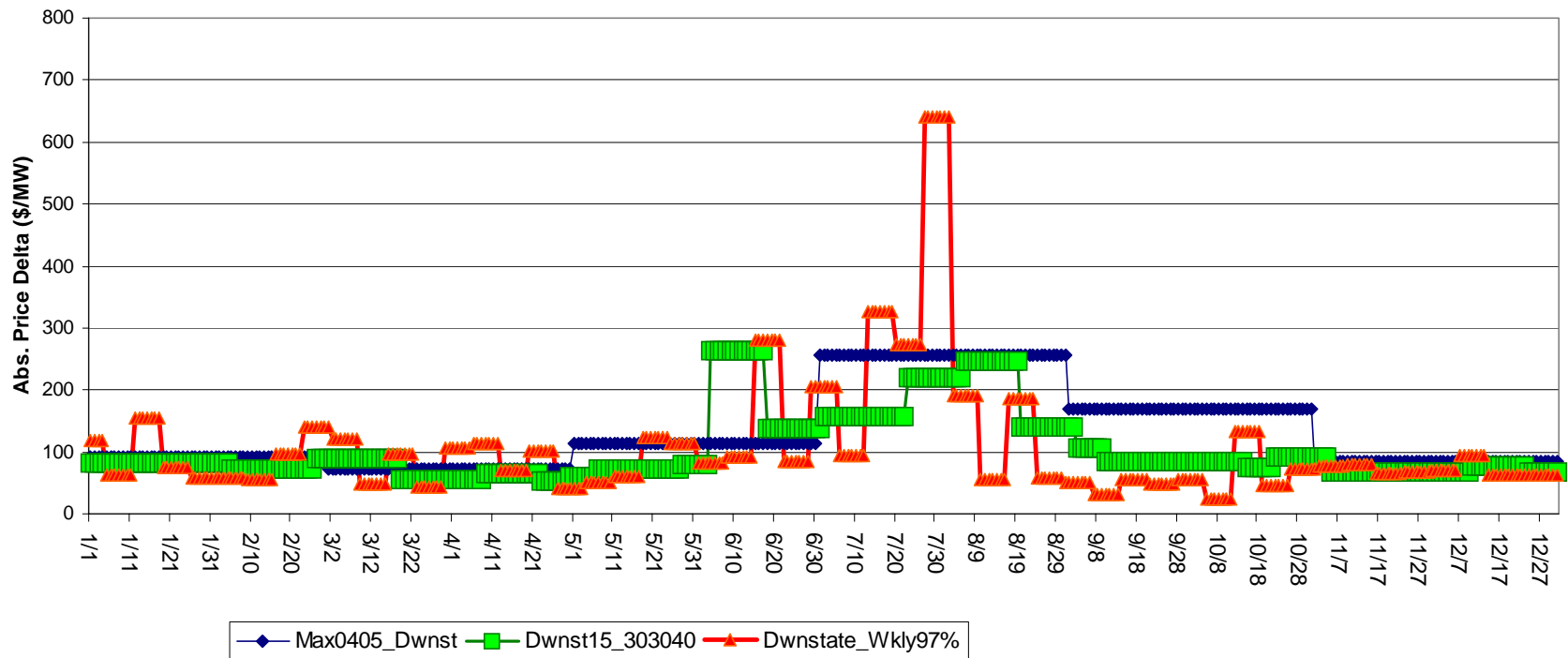
# Alternative Analysis – Zones A-F

**Zones A-F: Max Bimonthly vs. Wtd Avg vs. Actual 7-day 97th Pctile Rolling**  
(Wts are Bimonthly '04: 30%, Bimonthly '05: 30%, Rolling 15-day 97th Pctile: 40%)



# Alternative Analysis – Zones G-K

Zones G-K: Max Bimonthly vs. Wtd Avg vs. Actual 7-day 97th Pctile Rolling  
(Wts are Bimonthly '04: 30%, Bimonthly '05: 30%, Rolling 15-day 97th Pctile: 40%)



# Shortened Suspension Timeframes

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## Current Monitoring Action

- The NYISO Credit Department monitors daily (including weekends and holidays) the cumulative financial position versus established credit support, for all Customers participating in the Virtual Transactions market.
- When a Customer has cumulative month-to-date virtual trading losses greater than or equal to 50% of the amount of credit required, the Credit Department will make a demand for additional credit support or prepayment in an amount equal to the entire trading loss. This demand must be met no later than the close of the next business day.
- If the Customer does not comply, its trading privileges will be suspended until such time as the Customer complies.

## Current Suspension Timeframe

- If the trading loss is observed any day between Sunday and Thursday, a demand for credit support may be issued and can potentially be met during the next business day (i.e., anytime between Monday and Friday). If the demand is not met, NYISO will suspend trading privileges.
- If the trading loss is observed on Friday or Saturday, the earliest day a Customer can comply is Monday, which allows a trader to enter two additional days of bids and offers. If Monday is a holiday, then a trader can enter three additional days of bids and offers.

## Problem

- Because the current policy requires the NYISO to provide one business day to comply, up to three additional days (including a Monday holiday) of trading activity can occur, for which the Customer's net loss position could further deteriorate.

## Proposal

- If the NYISO observes cumulative virtual trading losses on Friday, Saturday or Sunday (if following Monday is a holiday), greater than or equal to 50% of the amount of credit support posted, then the Credit Department will issue a demand for credit support and suspend trading privileges immediately, until such time as the Customer complies.
- NYISO will institute a reporting mechanism that allows the Credit Department to determine a Customer's Virtual Transactions financial settlement prior to 5 a.m. the day after the operating day. If a Customer exceeds its established credit support by 100%, the Credit Manager will have the authority to remove any pending day-ahead bids before they are accepted for evaluation at 5 a.m. and suspend trading privileges until the Customer complies with demand for credit support.