

# Disaggregated Virtual Trading Concept Overview

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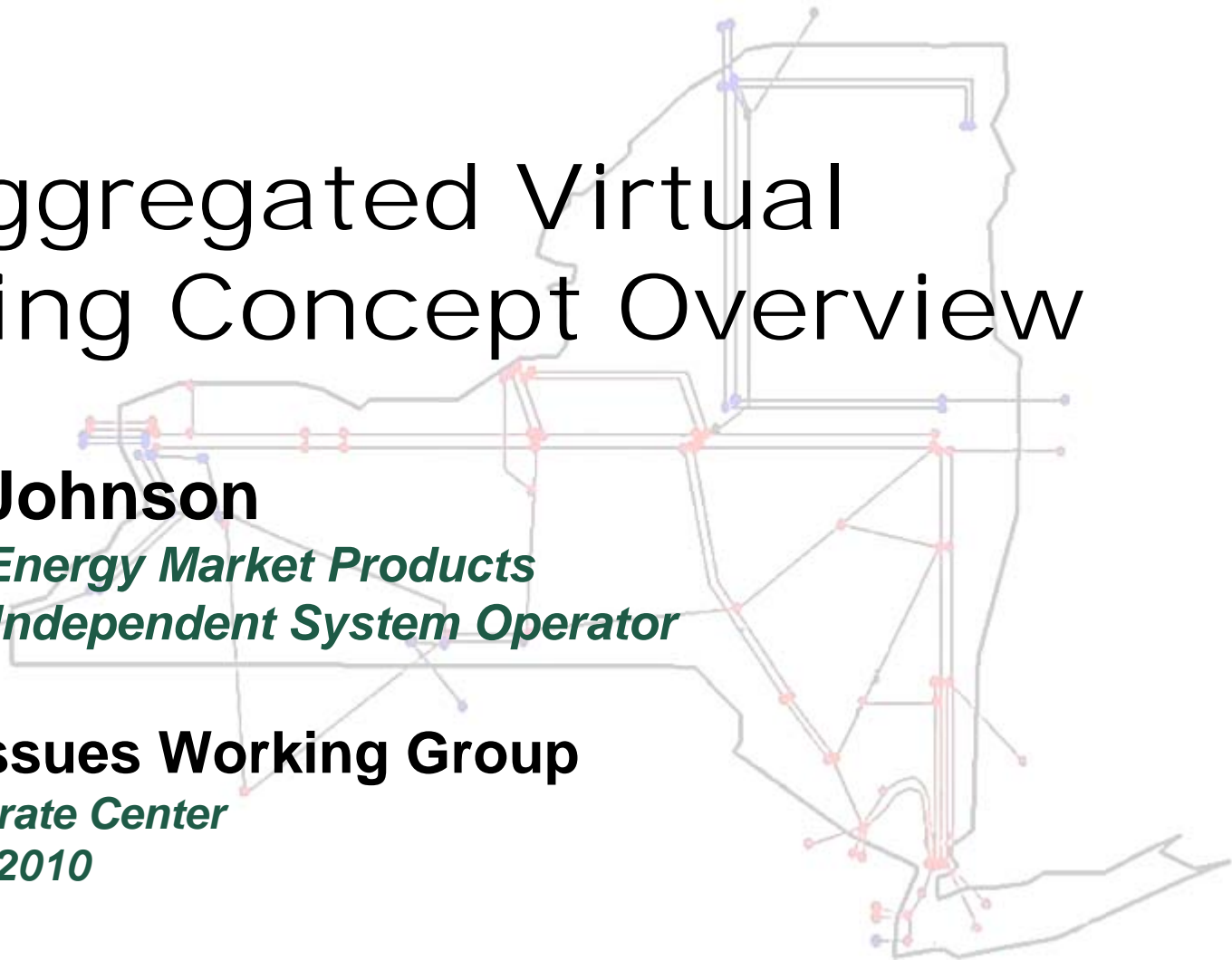
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# Agenda

- ◆ Purpose of Today's Presentation
- ◆ DVT Concept Overview
- ◆ Credit Requirements
- ◆ Benefits of DVT
- ◆ Next Steps

# Purpose

- ◆ Today's presentation is to preview the September BIC presentation seeking concept approval.
- ◆ This presentation is meant to focus on the goals and objectives of the DVT design; to insure that the discussion is working from a common starting point as future details as are discussed.

# ◆ DVT Concept Overview

# Objectives of DVT Design

- ◆ Increased Virtual Trading Opportunities
- ◆ Ensure DAM Integrity
- ◆ Mitigate Volume Exposure
- ◆ Mitigate Risk Exposure to Market Place
  - *Market Monitoring*
  - *Credit*

# Concept Design Overview

- ◆ Increased virtual Trading Opportunities
  - *Virtual trading (VT) at generator nodes*
    - Targeted goal of all NYCA generator locations

# Concept Design Overview

- ◆ Ensure DAM Integrity (Physical and Temporal)
  - *Schedule Limits*
    - Limit sum of schedules at each node to plus/minus 2x the capabilities of generation resource(s) at that location
  - *Soft Bid Volume Cap*
    - Invoked on as-needed basis
    - Determined by bid volume that NYISO can process and still meet timely DAM post
  - *Fail Safe Switch*
    - The NYISO will have the ability to suspend DVT, similar to the authority it has today

# Concept Design Overview

- ◆ Mitigate Volume Exposure (eliminate unnecessary/redundant data)
  - *Single trading node for each group of units modeled at a single point*
  - *MPs will have ability to prioritize bids upon submittal and will include bid start/end times*
  - *Virtual Bidding Fees*
    - Higher fees for uncompetitive offers
      - Incentivizes competitive offers
    - Reduces likelihood of “exploratory bids”
      - Using scheduling systems to evaluate offsetting offers
  - *Virtual Bid Segments*
    - 11 segments for virtual bids (and price-capped loads)



# Concept Design Overview

- ◆ Mitigate Risk Exposure to Market Place
  - *Monitor DAM and RT LBMPs for recurring deviation at one or more Virtual Transaction locations that would not be expected in a workably competitive market.*
  - *Monitor for recurring Virtual Transaction losses not expected in a workably competitive market*
  - *NYISO authority to impose penalties on Market Parties whose authority to Bid Virtual Transactions has been limited*
  - *Authority for NYISO to suspend generator nodes from virtual-trading eligible locations*

# Concept Design Overview

## Credit Requirements

# Proposed Disaggregated Virtual Trading Credit Requirements

- ◆ Credit requirements will be calculated at the 97<sup>th</sup> percentile for each DVT node based on time-of-year and time-of-day groupings
- ◆ Time-of-year groupings will remain the same as used for zonal virtual trading
  - Summer
  - Winter
  - Rest of Year

# Proposed DVT Time-of-day groupings

- ◆ Weekday Peak Hours ( HB 7 – 22)
  - Nodes in Zones J - retain current 4 hour blocks
  - Nodes in Zones A through I & K – retain current 4 hour blocks
    - HB 7 – 10
    - HB 11 – 14
    - HB 15 – 18
    - HB 19 - 22

# Proposed DVT Time-of-day groupings

- ◆ Nights ( HB 23 – 6)
  - Nodes in Zones J - change to 2 hour blocks
    - HB 23 - 0
    - HB 1 - 2
    - HB 3 - 4
    - HB 5 - 6
  - Nodes in Zones A through I & K – retain current 8 hour block
    - HB 23 - 6

# Proposed Time-of-day groupings

- ◆ Weekends/Holidays ( HB 7 – 22)
  - Nodes in Zones J - change to 4 hour blocks
  - Nodes in Zones A through I & K – change to 4 hour blocks
    - HB 7 – 10
    - HB 11 – 14
    - HB 15 – 18
    - HB 19 - 22

# DVT credit requirements timing

- ◆ Credit will be held throughout the life cycle of the bid in the same manner that it is held for virtual trading today.
  - Credit will be checked upon bid submission
  - DVT credit will be held until Day Ahead Market Validation is complete.
    - Credit will be held on accepted bids
    - Credit on rejected DVT bids will be released
- ◆ After the billing data is available, credit will be held for payments due the NYISO for virtual trading activity

# Disaggregated Virtual Trading Credit Requirements

- ◆ NYISO will hold credit coverage for Zonal and DVT bid fees
- ◆ Disaggregated Virtual Trading credit requirements will be updated and posted for Market Participants each month on the same schedule as zonal virtual trading credit requirements
  - csv and pdf files will be available



## ◆ Benefits and Next Steps

# Benefits of DVT

- ◆ Increased opportunities for arbitrage, thereby adding the potential for increased liquidity to the overall market
- ◆ Improved price convergence between DAM and RT markets, resulting in more efficient commitment and utilization of resources
- ◆ Improved price signals
- ◆ Improved convergence in areas with intermittent renewables
- ◆ Using 2009 data, Potomac Economics updated the estimates of the potential benefits of DVT to be at least \$2 million per year (based off of \$5 NG prices).

# Next Steps

- ◆ As requested by the BPWG, NYISO will bring the market and credit designs for DVT to BIC for conceptual approval in September
- ◆ Evaluate DVT for 2011 as part of the ongoing budget evaluation process
- ◆ Continue DVT design discussions in future MIWGs



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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