

# Overview of Topics for Discussion

SPWG

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Howard J. Haas



Monitoring Analytics

## Shared Overall Goals

- **Incorporate operational requirements and practice in the dispatch models**
- **Send locational price signals consistent with system conditions**
- **Send price signals consistent with security constrained dispatch and operational decisions**
- **Improve system operation during times of system stress**



## Shared Characteristics

- **Use of Operating Reserve Penalty Factor Curve to drive within hour dispatch and optimization**
  - **PJM proposing cumulative \$850 penalty factors that adjust marginal bus LMP (max price \$2,700) during reserve scarcity**
  - **MA proposes \$1,000 penalty factors that drive dispatch, with defined LMP targets (max price \$1,000) on marginal buses during reserve scarcity**
- **Emergency procedures (Voltage Reduction and Manual Load Dump) should not suppress price**

# Issues for discussion

- **Operating Reserve Penalty Factor Curves**
  - **10 minutes reserve target(s)—Synchronized Reserve (S.R.) and/or Primary**
  - **Scarcity price targets (\$1,000 vs. \$2,700)**
  - **Location specific opportunity costs**
  - **Handling morning pickup/min gen events (duration element)**



# Issues for discussion

- **Reserve measurement/Data Requirements**
  - **As part of final scarcity design need defined methodology for determining**
    - **Tier 1 S.R. available**
      - hour ahead
      - 5 minute basis
    - **Tier 2 S.R. available**
      - hour ahead
      - 5 minute basis
    - **Non Synchronized Reserve (part of Primary) available**
      - hour ahead
      - 5 minute basis
  - **Need resulting data prior to final design**



# Issues for discussion

- **The RPM Revenue Offset**
  - **Marginal unit designation**
  - **Scarcity Component**



## Issues for discussion

- **Structure of the Tier 2 Synchronized Reserve (S.R.) Market: Hour ahead scheduling vs. “full 5 minute optimization”**
  - **Cycling of assignment**
  - **Location specific opportunity costs**
  - **Participation of DR**
  - **Effects on generation participation and incentives**
- **The treatment of emergency measures vs. emergency resources**
  - **Emergency DR**
  - **Capacity Recalls**

# Issues for discussion

- **Capacity recalls**

- **As part of final scarcity design need written procedures on when and how to recall**
- **As part of final scarcity design need documented methodology to determine the amount of recallable capacity**
- **As part of final scarcity design need data based on methodology**





# Issues for discussion

- **Definition of reserve regions**
  - **Match current?**
  - **Dominion vs. Mid Atlantic S.R.**

