Day-Ahead Scheduling Manual Revisions

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DRAFT – FOR DISCUSSION PURPOSES ONLY

Background

- Day-Ahead Scheduling Manual revision presentation on MIWG/SOAS Nov. 7th
- Comments from MPs and ISO internal stakeholders
  - *Phase Angle Regulator Scheduling*
  - *SCUC Inputs*
  - *Load Modeling in MIS and LSE Load Forecast*

Feedbacks & Changes

- Phase Angle Regulator Scheduling (Section 4.2.7)
  - *Updated pursuant to **TB#152***
  - *The ABC interconnection will be scheduled on the Consolidated Edison Company of New York's Day-Ahead Market hourly election for the "600/400MW Contracts" plus ~~an adjustment of up to 13%~~ 0% of PJM-NYISO Day-Ahead Market hourly interchange*
  - *Similar for JK interconnection*

Feedbacks & Changes

- SCUC Inputs (Section 4.3.3)
  - ***Operating Bid*** *– The incremental energy bid for a generator is modeled as a ~~piecewise linear monotonically increasing cost curve~~ series of monotonically increasing constant cost steps.*

Feedbacks & Changes

- MIS Load Modeling and LSE Load Forecast
  - *Not used in day-ahead scheduling*
  - *Covered in MPUG and Accounting & Billing Manual*
- Deleted MIS Load Modeling and LSE Responsibilities (Section 6.4)
- Deleted Load Forecasts for Facilities in the Market Information System (Section 6.5)

Next Steps

- 1/16/2013 BIC
- 1/17/2013 OC

Appendix:

Day-Ahead Scheduling Manual Revisions

(MIWG/SOAS Nov. 7th)

Background

- Current Day Ahead Scheduling Manual was last updated on July 24th, 2001
- Standard Market Design 2 (SMD2) and many other market improvement initiatives have brought process/technology changes
- Technical Bulletins have been created to supplement the Manual and need to be incorporated

Structure Changes - I

- Introduction
  - *Includes "References" to other Manuals/User Guides directly related to Day-Ahead Scheduling*
- ~~Day-Ahead Scheduling~~ Overview
  - *Splits "Functions" into "Primary Functions" and "Supporting Functions"*
- Bid-Post System
- Day-Ahead Scheduling Process
- Day Ahead Interface to the Dispatch Day

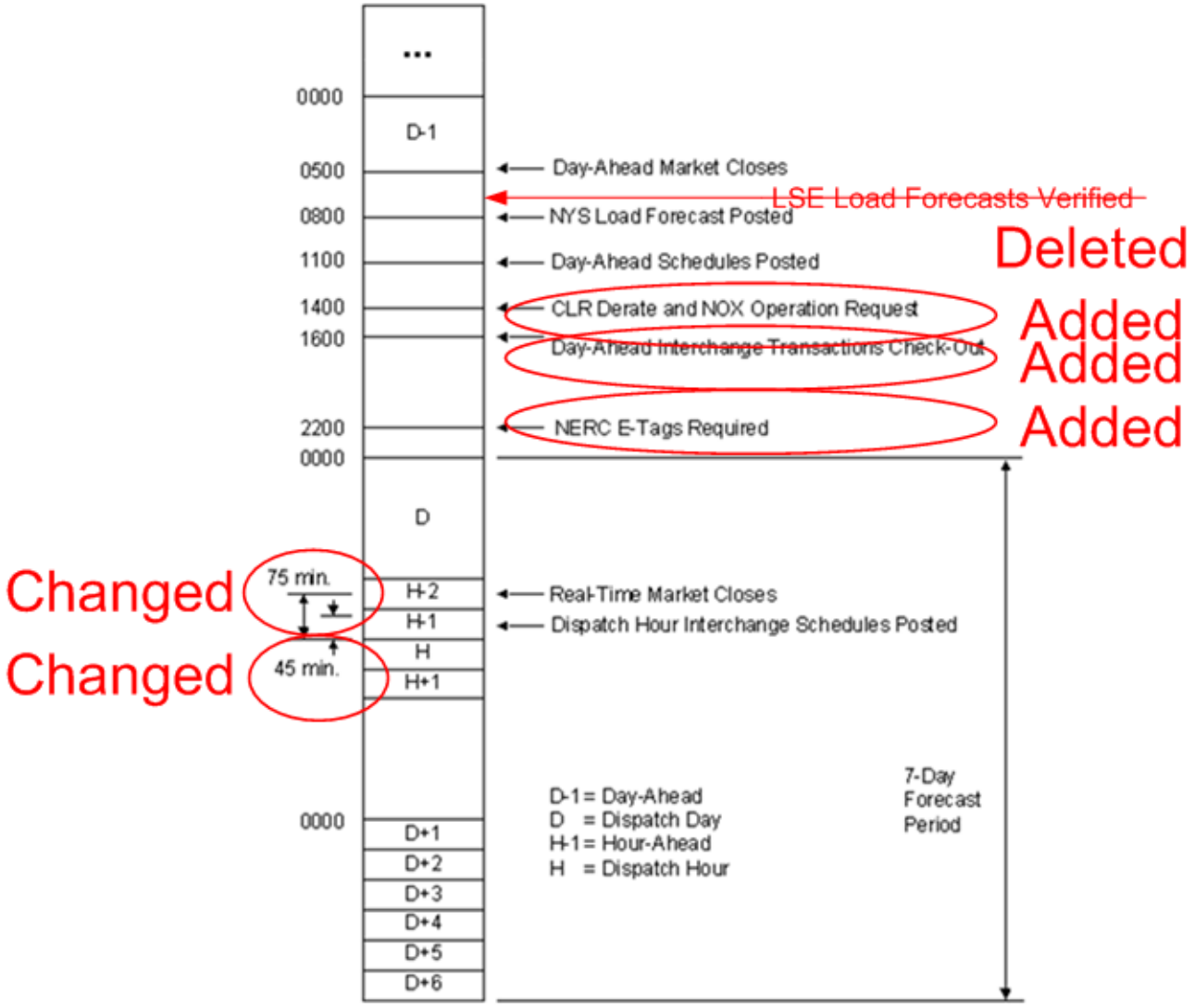
Structure Changes - II

- ~~Transmission Constraint Group (TCG) Assembly~~
- NYISO Load Forecast Process
- SCUC Execution
- Reliability Forecast
- Interchange Coordination Procedure
- Supplemental Resource Evaluation (SRE) One or More Days Ahead

Updated Terminology

- RTC replaced BME
- RTD replaced SCD
- PUC is obsolete
  - *Part of SCUC now*
- TCG is obsolete
  - *Functions related are carried over by other components*
- AGC replaced PTS
- AMP is added

Updated LBMP Timeline



Changes in Bid/Post Process

- Added Prohibited Transmission Paths in Validity Checks (Section 3.2)
  - *Prohibited transmission paths checks filter External Transactions schedule submitted over the eight prohibited circuitous scheduling paths*
  - *OATT Attachment J, Section 16.3.3.8*

Changes in Day Ahead Scheduling Process - 1

- Incorporated Technical Bulletin #26: Scheduling a "Must-Run" Generator (Section 4.2.4)
  - *Clarifies the misconception of "Must-Run"*
  - *Provides guidelines to improve the chances of a generator to be scheduled*

Changes in Day Ahead Scheduling Process - 2

- Incorporated Technical Bulletin #71: Multiple Response Rates for Generating Units (Section 4.2.5)
  - *Energy/Emergency/Regulating Capacity response rates*
  - *To encourage generating units to bid in Flexible mode*
  - *To reflect a unit's response capability more accurately*

Changes in Day Ahead Scheduling Process - 3

- Incorporated Technical Bulletin #182: Day Ahead Reliability Unit (DARU) Commitments (Section 4.2.6)
  - *Requested by TOs who know they will need generators committed to meet the reliability needs of their local system prior to the Day Ahead market run*
  - *The NYISO may initiate commitment for statewide reliability needs*

Changes in Day Ahead Scheduling Process - 4

- Phase Angle Regulator Scheduling (Section 4.2.7)
  - *ABC Interconnection*
  - *JK Interconnection*
  - *Branchburg-Ramapo Interconnection*
  - *Northport PAR*

Changes in Day Ahead Scheduling Process - 5

- Incorporated changes in Technical Bulletin #49: Multi-Pass Methodology of Security Constrained Unit Commitment (Section 4.3.1)
  - *Pass #1: Added Virtual Load, Virtual Supply and Day Ahead Reliability Units*
  - *Pass #2: Specifies "additional units needed to supply the forecast load" are committed*
  - *Pass #3: Reserved for use*
  - *Pass #5: Added Virtual Load and Virtual Supply*

Changes in Day Ahead Scheduling Process - 6

- SCUC Components (Section 4.3.2)
  - *Provides information about Ideal Dispatch (Pricing Pass) and Physical Dispatch (Scheduling Pass)*
- SCUC Inputs (Section 4.3.3)
  - *Provides information about Losses*
- Demand Curves (Section 4.3.4)
  - *Added the new section about demand curves on Regulation, Reserves and Transmission constraints*

Changes in Day Ahead Scheduling Process - 7

- Incorporated Technical Bulletin #86: Multi-Hour Block Transactions (MHBT) (Section 4.4.2)
  - *MHBT are evaluated based upon the total production cost over the day*
  - *A MHBT bid may not be scheduled even if it appear to be economic as compared to posted LBMP*

Changes in Day Ahead Scheduling Process - 8

- Incorporated changes in Technical Bulletin #32: Non-Firm Bilateral Transaction Selection Process (Section 4.4.3)
  - *Adds: Non-Firm Transaction Selector Program Logic and an Example*

Changes in Load Forecast Process

- Added Oracle Information Storage and Retrieval (OISR) in Load Forecast Functional Interfaces (Section 6.2.3)
- Added MIS Load Modeling and LSE Responsibilities (Section 6.4)
- Added Load Forecasts for Facilities in the Market Information System (Section 6.5)

Next Steps

- Nov. 16th MIWG (Optional)
- Dec. 5th BIC
- Dec. 6th OC

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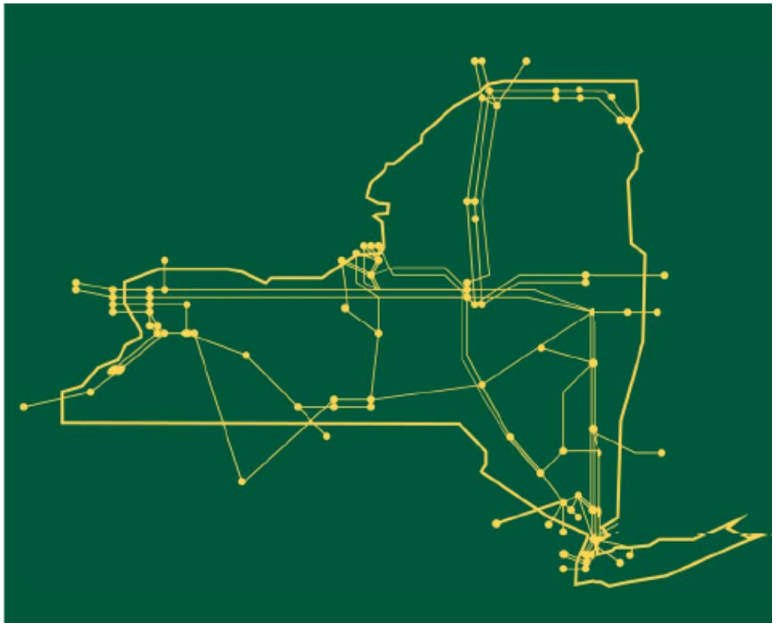

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