



Topaz Power Group LLC

Quick Start Task Force Meeting

January 28, 2011

Austin, Texas

Agenda

- Anti-Trust Admonition
- Discuss WMS Expectations
- Advanced Notice of Wholesale Electricity Prices
- SCED Look-Ahead
- Plan Future Work/Meetings
- Adjourn

WMS Expectations

- Identify one or more ways SCED look-ahead can operate in ERCOT for generators and price responsive load resources.

Advanced Notice Whitepaper

- Parviz Adib
- Mark Smith
- Jay Zarnikau

SCED Look-Ahead Elsewhere

➤ NYISO

- Real Time Commitment
- Real Time Dispatch – Corrective Action Mode

➤ CAISO

- Real Time Unit Commitment

➤ ISO-NE

- Unit Dispatch Software

➤ MISO

- Unit Dispatch Software



Benefits

- More economically rational prices
 - Introduce over 2,000 MW of supply at ~10 heat rates
- Lower Costs
 - Lowers costs associated with On-line reserves
- Serve public interest
 - Bring competitive solutions to address Real Time uncertainty, consistent with SB7

High Level Structure

- Short Term Forecasts (1 hour)
 - Net Load
 - Generation
- Binding Unit Commitment Decisions
 - 15 and 30 minutes before Real Time
- Make-Whole if Offer < Costs
- Respect Unit physical constraints

SCED Look-Ahead Constraints

- Non-zero Low Sustainable Limits
- Minimum run times
- Minimum down times
- No Energy pre-synchronization
- Start-Up costs

NYISO Real-Time Commitment

- 2:15 hour SCUC
- Co-optimizes for Load, Operating Reserves and Regulation
- Least as-bid production cost
- Issues binding commitments :15 and :30 in advance

5. SCHEDULING OPERATIONS

This section describes the Dispatch Day scheduling process, covering the following:

- Real-Time Commitment
- Scheduling Operations Requirements
- Scheduling Operations Procedures
- Supplemental Resource Evaluation Procedures

5.1 Real-Time Commitment

Real-Time Commitment (RTC) is a multi-period security constrained unit commitment and dispatch process that co-optimizes to solve simultaneously for Load, Operating Reserves, and Regulation Service on a least as-bid production cost basis over a two-hour and fifteen-minute optimization period. The optimization evaluates the next ten points in time separated by fifteen-minute intervals. Each RTC run within an hour shall have a designation indicating the time at which its results are posted; “RTC₀₀,” RTC₁₅,” RTC₃₀,” and RTC₄₅” post on the hour, and at fifteen, thirty, and forty-five minutes after the hour, respectively. Each RTC run will produce binding commitment instructions for the periods beginning at fifteen and thirty minutes after its scheduled posting time, and will produce advisory commitment guidance for the remainder of the optimization period. RTC₁₅ will also establish External Transaction schedules. Figure 5.1-1 presents the timeline for RTC₁₅.

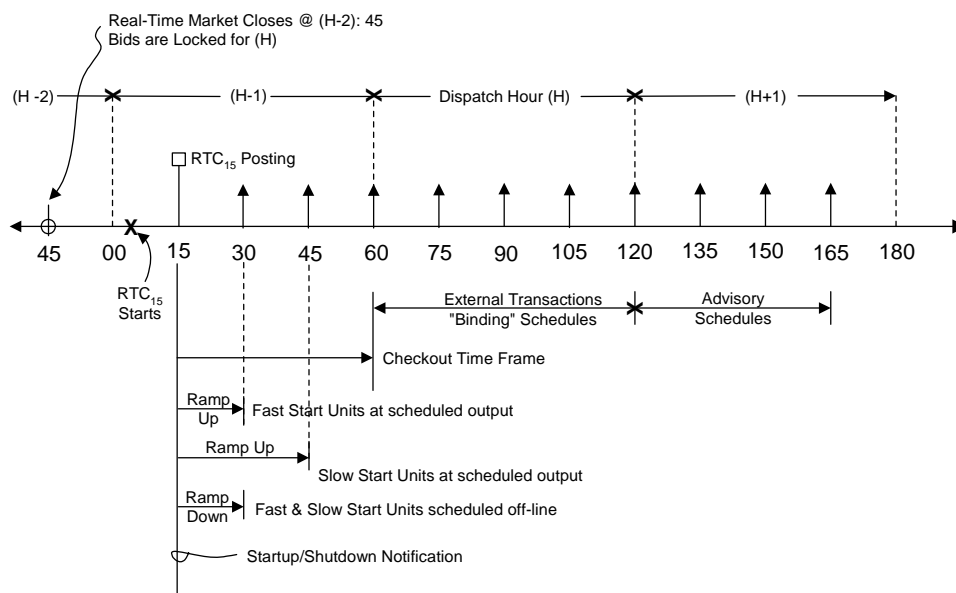


Figure 5.1-1: RTC₁₅ Time Line

Action Items

- Identify key discussion points for February 9 WMS Meeting
- Identify key issues to articulate in white paper
- Plan next QSTF meeting