Market Simulation Spring 2013 Release

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Spring 2013 Release
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Agenda

• Market Simulation Initiatives and Timelines
• MAP Stage Availability
• Local Market Power Mitigation (LMPM) Enhancements Phase
• FERC 755 - Pay for Performance (PFP) Regulation Initiative
• Multi-Stage Generation (MSG) Enhancements Phase 3
• Price Inconsistency Market Enhancements (PIME)
• Mandatory Multi-Stage Generation (MSG)
• FERC Order 745 - Changes to the DR Compensation for PDR
• Next Steps
• Reference Slides
Spring 2013 Release Market Simulation Initiatives and Timelines

Local Market Power Mitigation (LMPM) Enhancements Phase 2 – 3/11 - 3/22 (Structured Simulation)

FERC 755 - Pay for Performance (PFP) Regulation – 3/11 - 3/22 (Structured Simulation)

Multi-Stage Generation (MSG) Enhancements Phase 3 – 3/11 - 3/22 (Unstructured Simulation)

Price Inconsistency Market Enhancements (PIME) – 3/11 - 3/22 (Unstructured Simulation)

Mandatory Multi-Stage Generation (MSG) – One week a month from now until October, 1st. We will settle the third Thursday of each month in conjunction with our week long unstructured test (Unstructured Simulation)

Replacement Requirement for Schedule Generation Outages (RRSGO) Phase 2 - TBD
MAP Stage Availability

MAP Stage Spring Release Daily Maintenance Window - 16:00 - 20:00 PPT

MAP Stage Weekly Maintenance Window - Thursday’s, 09:00 – 20:00 PPT
Local Market Power Mitigation (LMPM) Enhancements Phase 2 Simulation Timeline

The Local Market Power Mitigation (LMPM) Enhancements Phase 2 Simulation timeline –

- LMPM Enhancements Phase 2 Simulation Schedule Dates: 3/11 - 3/22
- LMPM Enhancements Phase 2 Transmission NC congested interfaces request cutoff: (TBD)
- LMPM Enhancements Phase 2 Structured Scenario Execution Date: 3/20 and 3/21
- LMPM Enhancements Phase 2 Settlements: 3/12 - 3/14 and 3/18 - 3/21

LMPM Enhancements Phase 2 Market Simulation Structured Scenarios -

- Please note - Exceptional Dispatch Mitigation in Real-Time component of the LMPM Enhancements Phase 2 initiative, scheduling and exceptional dispatch can be requested via email at MarketSim@caiso.com
FERC 755 - Pay for Performance (PFP) Regulation Simulation Timeline

The FERC 755 - Pay for Performance (PFP) Regulation Simulation timeline –

- FERC 755 - (PFP) Simulation Schedule Dates: 3/11 - 3/22
- FERC 755 - (PFP) Structured Scenario Execution Dates: 3/14

FERC 755 - Pay for Performance (PFP) Regulation Market Simulation
Structured Scenario -
FERC 755 – Market Simulation Scenario

• Market Simulation scenario executed on 3/14.
• DAM Results: Results published at 13:50 pm. Mix of resources (Non-NGR/NGR) awarded Regulation and Mileage.
• RTM Results: Observed resources getting awarded Regulation and Mileage in RTM.
• Market system integrated with EMS simulator.
• EMS files published.
• Objective

The main objective of the simulation is to show pay for performance functionality with good mix of resources awarded regulation/mileage. Along with that objective, CAISO also wants to show the mileage functionality to both conventional regulation units that operate in production and the upcoming non-generator resources. The market simulation base data set is from a production scenario with introduction of the non-generator resources. Although CAISO tries to keep the scenario close to production, the market simulation results themselves shall not be used as a would-be production scenario.
FERC 755 – Day Ahead summary

• Assumptions
  1. Regulation requirement for TD 3/14/2013 = 350MW
  2. Mileage requirement = 350 * 3.5 = 1225MW.
  3. Mileage parameters:
     Since CAISO has no production mileage multipliers yet, the following assumptions are used:
     – System level mileage multiplier: 3.5
     – Conventional generators mileage multiplier: 3
     – Non-Generator resources mileage multiplier: 10
     – All initial mileage bids are default to zero.

These assumptions proved to show a good mix of day ahead regulation/Mileage awards with reasonable prices. There are non-zero mileage bids submitted by various market participant.

The Day ahead results were published on time at 13:50 demonstrating on impact of DAM performance with PFPR.
Multi-Stage Generation (MSG) Enhancements Phase 3 Simulation Timeline

The Multi-Stage Generation (MSG) Enhancements Phase 3 Simulation timeline –

- MSG Enhancements Phase 3 Simulation Schedule Dates: 3/11 - 3/22
- MSG Enhancements Phase 3 Unstructured Scenario Execution Dates: 3/11 - 3/22
Price Inconsistency Market Enhancements (PIME) Simulation Timeline

The Price Inconsistency Market Enhancements (PIME) Simulation timeline –

- Price Inconsistency Market Enhancements Simulation Schedule Dates: 3/11 - 3/22
- Price Inconsistency Market Enhancements Unstructured Scenario Execution Dates: 3/11 - 3/22
Mandatory Multi-Stage Generation (MSG) Simulation Timeline

The Mandatory Multi-Stage Generation (MSG) Simulation timeline –

- Mandatory MSG Simulation Schedule Dates: One week a month from now until October, 1st. We will settle the third Thursday of each month in conjunction with our week long unstructured test.
Spring 2013 Release – DR Net Benefits Test
FERC Order 745 Compliance – DR compensation in organized wholesale Markets

FERC Order 745 unstructured scenarios – The Settlements code for FERC 745 is available for Scheduling Coordinators to test

• Change Settlement Charge Codes (RT Energy Pre-Calc, CC6806)
• Code is currently active in Map Stage
• Code will be deployed into production 3/25/2013 and the activation date is retroactive to December 15, 2011
• Any requests for unstructured scenarios will be considered on a case by case basis.

Note: There has been no change to DRS as a result of these settlement code changes.
Next Steps

• The next teleconference will take place at 13:00 PPT on Monday, March 25th, 2013.
Spring 2013 Release Market Simulation Plan

• [http://www.caiso.com/Documents/Spring%202013%20release%20plans](http://www.caiso.com/Documents/Spring%202013%20release%20plans)