



Decision on MRTU Budget & Briefing on MRTU

Steve Berberich
Vice President – Corporate Services

Board of Governors Meeting
General Session
September 8-9, 2008

We have made significant progress since the last Board meeting.

- August 20th – resumed Market Simulation
- Day Ahead market has established stability and is producing good results (in most cases)
- Hour-Ahead, Real-time Pre-Dispatch and Real-time Dispatch all are now stable
- Charge Code Target: 125 charge codes bid-to-bill validated – 108 validated
- Issues remain but they are not impacting fundamental stability

The issues we have are known.

- SIBR performance – issue seems to be simultaneous requests from participants in excess of design parameters
- Extraneous issues periodically impact performance
- OASIS performance had been a lingering problem but may now be resolved
- Intermittent quality of solution issues – seems to be tied to initial condition of units which is a simulation phenomena
- Final variances need to be addressed

Results are published timely and participant interfaces are available.

- Publish HASP, RTPD, RTD = 91% of the time
- CAISO Market Results Interface (CMRI) available:
 - Graphical User Interface = 99.25%
 - Automated Programmatic Interface = 99.38%
- Open Access Same-time Information System (OASIS)
 - Graphical User Interface = 100%
 - Automated Programmatic Interface = 99.75%
- MRTU Portal, Scheduling and Logging Information of CAISO (SLIC), and Operational Metering & Reporting (OMAR) are similarly available
- While applications are available, still have periodic data issues

Day-Ahead Market in market simulation is stable.

Since August 20th:

- Day-Ahead Market publish results every day = 100%
- Results publish by production timeline = 13 of 15 days
- Market Participants bids are the basis for running each day's market
 - Typically, 800 – 1000 bids processed daily
- Market Participant trades are submitted after Day Ahead Market publishes
 - Typically, 1500 – 2000 trades daily

Real-Time Market has shown marked improvement

Outside of patching windows...

- HASP hourly intervals consistently solving
 - In excess of 95% over last several days
- RTPD 15-minute intervals solving
 - In excess of 95% over last several days
- RTD 5-minute intervals solving
 - In excess of 95% over last several days
- Predominately AC solutions

Bid-to-Bill validation of settlements charge codes has reached critical mass.

- Total of 125 Charge Codes
 - All charge codes have been unit tested
 - All charge codes are available for participant testing
- CAISO Bid-to-Bill Validation of all components:
 - Valid Daily/Monthly Charge Codes = 43 of 49
 - Valid Special Charge Codes = 65 of 76
 - Total of 108 of 125 Bid-to-Bill validated
- Scenario testing still required for validation of ~ 15 codes

Settlement statements and invoices are being published.

- Settlements is the most critical piece for participants
- Daily Statements have published every day of market simulation
- Monthly settlement statements
 - March, April, May, June & July completed
 - Mini-monthly runs completed
 - August on track for second week of September
- Invoices
 - April, May, June & July published
 - August invoice targeted for second week of September

Market Simulation quality of solution is good.

- Quality of prices based on expectations has been improving
- Day-Ahead price and results mostly meet quality criteria or are explainable
- Performing daily price validation using the LECG validation methodology and providing a report to participants
- Real-time price spikes that we saw earlier seem to be diminished
 - Increased available RUC capacity
 - Investigating sources of congestion and modeling improvements

LECG continues their analysis and final report anticipated at October Board meeting.

- LECG Report:
 - Planned scope of analysis track testing is completed
 - Prices and dispatches are consistent with economic objectives
 - No fundamental issues with pricing were observed
- LECG also completed additional analysis on, report due in October:
 - Wheeling, Nomograms and contingency case
 - Nomograms (DAM)
 - Real-Time LAP
 - Wheeling case (DAM)
 - Rerunning of Case B with LAP
 - Forbidden Operating Region case
- LECG continues to validate:
 - Ancillary Service Deficiency still being analyzed
 - Forbidden Region case

Given base system functionality has stabilized, we are now focused on what's left.

- Consistency needs to continually to be demonstrated
- Scenario testing needs to be completed
- Charge code validation needs to be completed and we need to work through issues reported by participants
- Remaining variances need to be reasonably resolved
- We need to migrate to production hardware and execute operational testing
- Exit criteria needs to be met

Participant scenarios still need to be completed.

- Working with Market Participants, number of scenarios required was reduced from 56 to 34
 - 25 Priority 1 – run scenarios prior to October 1
 - 9 Priority 2 – run scenarios after October 1
- 7 Scenarios initially completed will be re-run
- Scenarios will be run utilizing end to end business processes
- All scenarios have been internally tested with Market Participant data

Today's assessment of 19 exit criteria in 5 categories needed for completion of simulation.

- **Variance Count – on track**
 - 0 Critical
 - 20 Very-high variances (5 currently in development/testing)
 - 300 High variances (100 in development/testing)
- **Market Simulation Participation - *completed***
- **Settlements - on track**
 - 108 of 125 Charge Codes are Bid-to-Bill validated
 - Publish Daily and Monthly Statements
 - Publish Invoices
 - Publish Re-issue and Re-calc statements
- **Markets Run / Solve – on track**
 - Specific time criteria for successfully solving markets
 - Market Participant Scenarios starting again, 34 required
- **CAISO IT Requirements – target for October**

Given the delays in the program, it is necessary for us to request additional budget authority

Current Approved Budget	\$189,223,000
Actuals through 6/30/08	\$187,605,305
Current Budget Remaining	\$ 1,617,695
Impact of 1 year delay	\$ 8,277,000
Program Contingency	\$ 2,000,000
Revised Estimate to Complete	\$199,500,000

Assumes a January 31, 2009 Go Live

Congestion Revenue Rights

- 2009 split between Year 1 rules and Year 2 rules
 - Revising sequence to allow additional time for participant analysis
- Annual process underway
 - Annual process takes 7 month for preparation and implementation
 - Preparations complete
 - First Tier nominations open tomorrow, September 10th
 - Closing is September 12th
 - Results scheduled to post on September 19th
 - Annual process scheduled to complete on November 21st
- Load Migration implementation changes needed
 - Originally intended to make load migration adjustments before the start of the allocation process
 - Insufficient data to perform now, more granularity required
- FERC tariff amendment made yesterday to adjust process