

Briefing on MRTU



Steve Berberich Vice President, Corporate Services

ISO Board of Governors Meeting General Session December 16-17, 2008

We have progressed since the last Board meeting

- Collaboration with participants remains outstanding
- Participants have made significant progress in their readiness
- The last structured release was implemented on December 13 – 14
- Remaining issues continue to show a downward trend
- Settlements issues have narrowed significantly
- Some pricing questions remain



To address pricing questions, a real time test was executed

- The test held variables constant and minimized simulation issues
- Of particular importance was market performance in the following areas:
 - Extent and root cause of extreme Locational Marginal Prices (positive & negative)
 - LAP price differentials
 - Evaluation of Residual Unit Commitment market outcomes
 - Price convergence and/or explainable differences between sequential markets (Day-Ahead, HASP, Real-Time)



Preliminary results show that the issues were narrowed

- Initial results demonstrated resolution of most lingering concerns
- There was convergence between hourly Real Time prices and Day Ahead prices
- Price spikes were generally limited to peak hours as expected
- Price volatility diminished



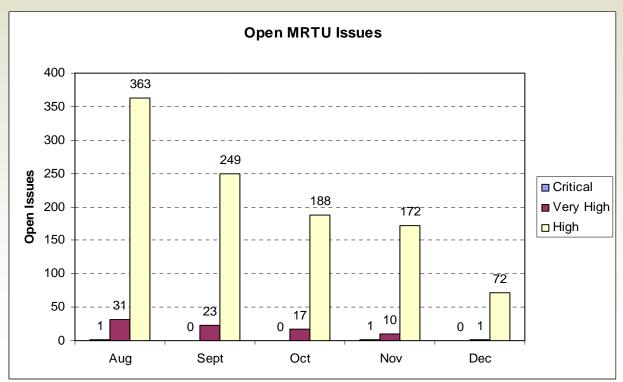
With the test completed, we have exhausted the capabilities of the simulation environment

- The quality was demonstrated to the extent possible within the simulation environment
- Simulation issues cannot be fully eliminated
 - Re-initialization of the simulation causes dispatches to reset
 - Stopping and starting the EMS simulator causes real time instability
 - Non-production environments impact reliable execution
- The Real Time test occupied critical resources for almost a month
- Until we are fully connected to the production Energy Management System, we cannot fully mimic the telemetry feedback of the system
- We will continue to run the simulation to support market readiness activities



Progress on open issues has been good

- Issue resolution has been a major focus of the team
- The efforts are showing positive results





We are narrowing the settlements issues

- QA team was created to track data flows and review statements before they are released
- Data traceability issues are largely resolved
- Participants report significantly better statements but want to see more results
- Issues range across the board
 - ISO variances
 - Shadow system variances
 - Misunderstandings
- We will continue to work with participants and key vendors to close remaining issues



Grid Operations continues their readiness preparations

- Round-the-clock staffing provides hands on experience
 - Accommodating outages, interchange schedules and dispatches
 - Continued, albeit diminished, support over the holidays
- In January, we will move to parallel operations during which MRTU will track current operations
 - Replication of outages
 - Current load forecast
 - Operations tests
- One real time dispatch test was completed on December 8.
 Further tests are planned in January.



Internally, we will execute to the schedule as currently planned

- We will continue to support the simulation environment to facilitate participant testing and training
- Internally, we will turn our focus to Grid Operations readiness and post go live processes
- We will execute several key tasks over the next six weeks
 - Initiate parallel operations processes
 - Initiate monthly CRR production process for March 2009
 - Provide an FTR auction for 2009 2010
 - Complete cutover/reversion planning and walkthroughs
 - Tighten criteria for any patches
 - Conduct real time cutover tests

