



CALIFORNIA ISO

California Independent
System Operator

Market Monitoring Report

**ISO Board of Governors Meeting
January 24, 2006**

**Jeff McDonald, PhD
Manager, Market Monitoring**



DMM Key Issues

- Natural Gas Prices and the Bid Cap Level
- Forced Outages for Generation Facilities
- Competition in Ancillary Services
- Intrazonal Congestion South of Pastoria
- Other Issues
 - Alternatives for default RTMA price
 - Updated RTMA analysis forthcoming
 - Annual Market Issues and Performance Report forthcoming



Natural Gas Prices and the Bid Cap Level

- CAISO filed for \$400/MWh (hard) bid price cap for the real-time energy market on December 21, 2005, in response to increasing natural gas prices (up to \$14.28 / mmBtu).
- FERC has yet to issue Order on request (as of 1/13).
- Natural gas spot prices have declined since mid-December to \$7.50 / mmBtu but remain highly volatile.
- At \$250 cap, offers from imports negatively correlated with natural gas price.



Forced Outages for Generation Facilities

- Issue was raised in December meeting regarding potential upward trend in forced outages.
- DMM has been monitoring outages for generation facilities - Forced outage rate in 2005 at or below 2004 rate except for July
- July 2005: heat wave with loads persisting above 40,000 MW for all but 3 days between July 11 and Aug. 12. All internal resources running w/o down-time for routine maintenance. Increased forced outage rate at end of July / beginning of August.
- DMM and Operations Support are coordinating on additional analysis to include forced outages for transmission facilities.



Intrazonal Congestion South of Pastoria

- Lower loads in Central CA coupled with line reconductoring have resulted in intrazonal congestion at the Pastoria Substation.
- Resulting generation pocket requires decreasing schedules from Big Creek Hydro Facility (SCE) and Pastoria Generating Facility (Calpine).
- Intrazonal redispatch costs totaled \$6.3 million between 9/1 and 12/31.



Competition in Ancillary Services – Preliminary Results

- Review of competition in Ancillary Service markets shows low level of competition in SP26 with potential for improvement from capacity previously not offered.
 - SP26 observed offers show Residual Supply Index < 1 in over 90% of hours in 2005.
 - Available certified A/S capacity sufficient to greatly improve competitive landscape of A/S procurement in SP26.
- Low proportion of certified A/S capacity offered into market.
 - Uneconomic for some units to run, so no A/S offer.
 - Opportunity cost of providing A/S not covered by A/S revenues at current prices.
- DMM will perform more detailed analysis of available and offered capacity - white paper in March.



Other Issues

- Alternatives for a default RTMA price when RTMA produces \$12 (work in progress).
- Updated RTMA analysis with lessons learned to be released in March.
- Annual Market Issues and Performance Report to be presented at March 8th BoG Meeting.