

Operations Highlights Report

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Notable Events

Transitional Capacity Procurement Mechanism Designation

On December 19, 2008, the California Independent System Operator Corporation (the ISO) issued a must offer waiver denial (MOWD) for Ormond Beach Unit 2, and this resulted in a designation of capacity under the transitional capacity procurement mechanism (TCPM). As a result of multiple transmission outages and a generation outage in the same local area, the ISO needed to commit capacity for local reliability reasons on December 19, 2008 and kept the unit online through December 21, 2008.

The MOWD was issued as a result of planned generation and transmission outages resulting in the need for additional on-line capacity in the Southern California local area. Ormond Beach Unit 2 was self-scheduled on 12/18/08 and a MOWD was issued for 12/19/08 to keep the unit online. In review of the commitment, the ISO has determined that there was an available resource adequacy unit that was approved a must offer waiver which had enough available capacity to meet the reliability requirements for the local area. The only non-generation solution would have been to cancel the approved transmission outages. Since the transmission outages were approved while Ormond Beach Unit 2 was self-scheduled and online, the transmission outages were allowed to continue after Ormond Beach Unit 2 did not submit a self schedule for 12/19/08.





The *Outage Activity Summary* graph shows the number of forced, scheduled, and cancelled generation and transmission outages processed per month by the Outage Coordination Office. Included in the graph is the number of restricted maintenance operations (RMO). RMO accommodates additional transmission or other maintenance on the grid.

Bias numbers for October, November, and December were 22.22%, 23.84%, and 22.89% respectively. The bias level has stabilized to a relatively reasonable level. Market Operations is continuing to monitor the bias and look for ways to reduce bias on the production system, as appropriate and accounting for the limited life span of the production system.





CPS1 is a statistical measure of area control error (ACE) variability. It measures ACE in combination with the interconnection frequency. Because the CPS1 formula was developed on a conformance scale, values over 100% are not only desired, but also expected. CPS2 is a statistical measure of ACE magnitude. It is designed to limit a control area's unscheduled (or inadvertent) power flows that could result from large ACE values.

OTC violations are defined as path overloads that exceed WECC allowable time limits for both stability-rated and thermally-rated paths.





The RMS program has been replaced by the WECC/NERC Mandatory Standards Compliance Program. No additional RMS sanctions anticipated.



Frequency disturbances are result of a sudden loss of load or generation. ISO DCS violations are those losses of generation greater than 35% of our most severe single contingency (currently 402.5 MW), where the *area control error* (ACE) is not recovered within 15 minutes.





Operations Support continues to monitor changes in trends (both positive and negative) of *unaccounted for energy* (UFE) prior to and after preliminary settlement statements. For the month of September, Operations Support did not identify any outstanding issues. The graph shows the amount of system unaccounted for energy.

•. Amounts estimated for October 2008. There is a 75 day time lag before actual UFE data becomes available.

NOTE: UFE% is estimated at this time



Neutrality number includes both the neutrality adjustment (CT-1010, CT-1401) & existing contract charge/adjustment (CT-1210)

*There is a 75 day time lag before actual neutrality data becomes available.







RMR decreased in 2008 to 10 facilities consisting of 23 units; down from 13 facilities consisting of 35 units in 2007.

* There is a 120 day lag time before final actual RMR data becomes available.

** January thru May adjusted invoices not yet received by Borders, El Cajon and Enterprise.

Operations Support monitors suppliers of ancillary services to ensure that ancillary service capacity awarded in the ISO markets is available in real-time. In both September and October, 2008, an average of 99 percent of scheduled regulation was available. In September and October, an average of 95 percent and 97 percent, respectively, of scheduled spinning reserve and non-spinning reserve was available. The total value of rescinded payments was approximately \$280,192 for September and \$240,977 for October.

The graph shows the monthly totals of non-compliant ancillary service capacity (MW) for twelve months.





The graph above shows the volume of disputes from February 2003 through December 2008.



Definitions The following are definitions of the items and or systems covered in the Operations Performance Scorecard section of this report:

WECC Monetary Sanctions - Measures through WECC's reliability management system (RMS) criteria. The RMS criteria include items such as *operating reserve* (OR), *operational transfer capability* (OTC), *disturbance control standard* (DCS), system operator certification, and compliance with WECC's Unscheduled Flow Reduction Procedure.

Control Performance Standards 1 & 2. - *Control Performance Standard 1* (CPS1) is intended to provide a control area with a frequency sensitive evaluation of how well it is meeting its demand requirements. CPS1 is a statistical measure of *area control error* (ACE) variability. *Control Performance Standard 2* (CPS2) is a statistical measure of ACE magnitude. It is designed to limit a control area's unscheduled (or inadvertent) power flows that could result from large ACE values.

Operating Transfer Capability Violations - OTC violations are defined as those transmission path overloads that exceed WECC allowable time limits for stability rated (20 minute) and thermally rated (30 minute) paths.

ISO Control Area Frequency - The ISO *control area frequency* figures report internal and external system disturbances and include violations of the *Disturbance Control Standard* (DCS) resulting from ISO Control Area internal disturbances, such as loss of a large generating unit or transmission line. WECC allowable time limit for disturbance recovery is 15 minutes. Per WECC criteria, qualifying disturbances are defined as those greater than 35% of our maximum generation loss from our most severe single contingency. The ISO's most severe single generation contingency is a nuclear unit with maximum generation output 1120 MW, 35% of which is the 392 MW thresholds used herein.

Real Time Bias - The number entered manually by an ISO operator into real time market application (RTMA) to adjust for the energy deviation between RTMA and the energy management system (EMS).