

Operations Highlights Report

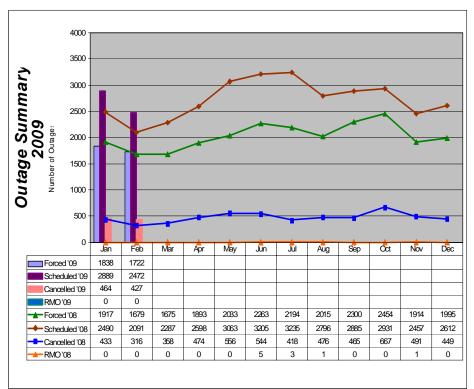
Notable Events **Operations Highlights**

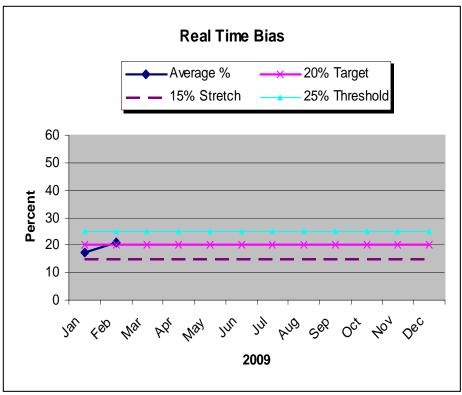
Real-Time Grid Operations Update on Hydro

The most significant event relative to Grid Operations was the increased rain and snow fall that occurred in late February and early March. This much needed resource will have a positive impact in our ability to meet this summer's peak demands.

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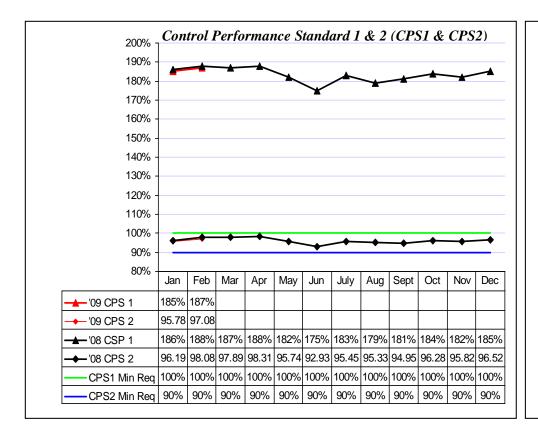


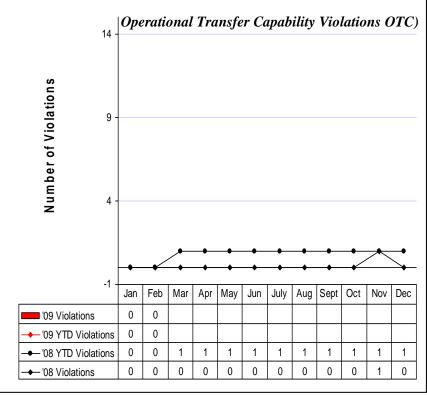


The *Outage Activity Summary* graph shows the number of forced, scheduled, and cancelled generation and transmission outages processed per month by the Outage Coordination Office. Included in the graph is the number of restricted maintenance operations (RMO). RMO accommodates additional transmission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

Bias numbers for January and February 2009 were 22.89%, and 17.31% 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.



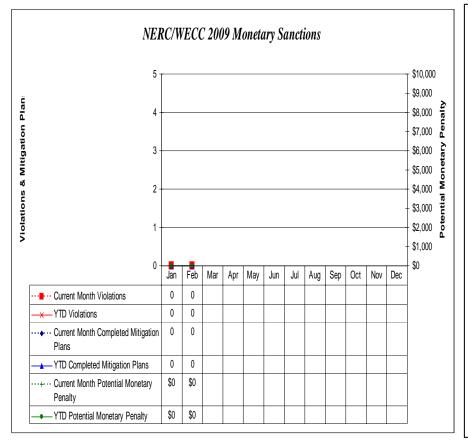


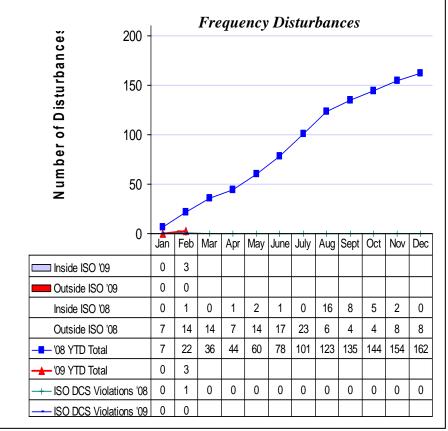


CPS1 is a statistical measure of area control error (ACE) variability. It measures ACE in combination with the interconnection frequency. Because the CPS1 formula was developed on a conformance scale, values over 100% are not only desired, but also expected. CPS2 is a statistical measure of ACE magnitude. 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 Western Electricity Coordinating Council (WECC) allowable time limits for both stability-rated and thermally-rated paths.





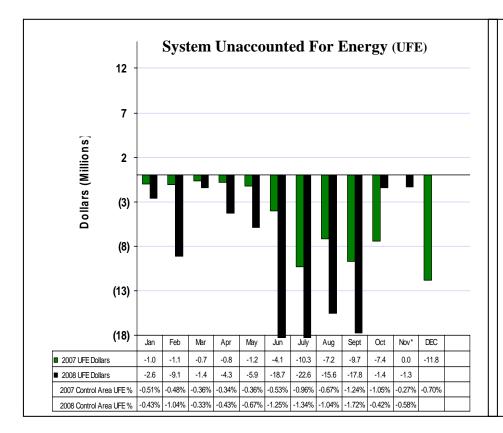


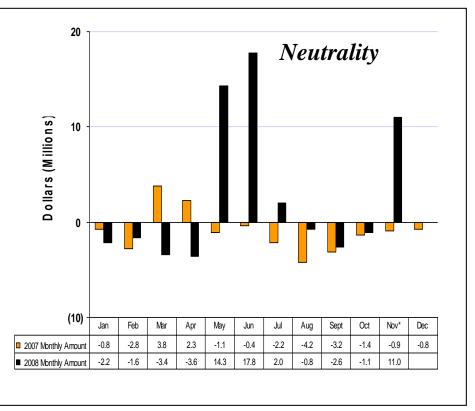
There were no Reliability Standards violations for the current month, therefore no completed mitigation plans.

There were no notices of proposed penalties for the current month.

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 October, Operations Support did not identify any outstanding issues. The graph shows the amount of system unaccounted for energy.

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

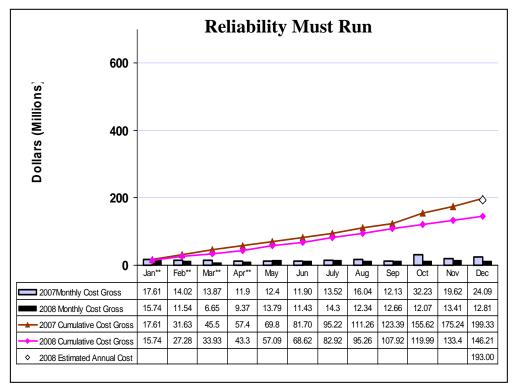
NOTE: UFE% is estimated at this time

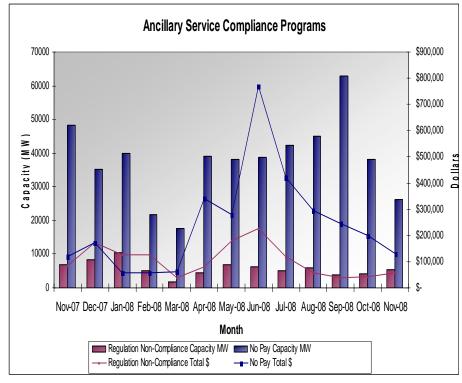
Neutrality number includes both the neutrality adjustment (CT-1010, CT-1401) & existing contract charge/adjustment (CT-1210)

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

The circumstances for November are the same as for May. There is higher variance between scheduled and actual MWh quantities in November 2008 (also Dec. 2008) compared with October. This characterizes loop flows in the system and result in unscheduled flows that directly impact the settlement of imbalance energy since scheduled import and export energy is deemed delivered by the ISO and adjacent control areas.







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

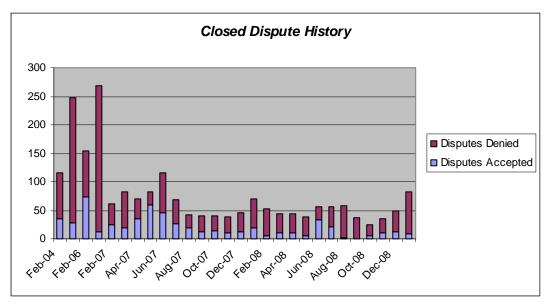
Operations Support monitors suppliers of ancillary services to ensure that ancillary service capacity awarded in the ISO markets is available in real-time. In November, 2008, an average of 99 percent of scheduled regulation was available. An average of 98 percent of scheduled spinning reserve and non-spinning reserve was also available in November. The total value of rescinded payments was approximately \$185,878 for November.

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

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

^{**} January thru October adjusted invoices not yet received by Borders, El Cajon and Enterprise. Adjusted invoices for October and November are not yet due for all facilities.





The graph above shows the volume of disputes from February 2004 through January 2009.



Definitions

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

WECC Monetary Sanctions - Issued when there has been a violation of a Reliability Standard. Monetary Sanctions are based on violation risk factors, violation severity levels and impact on the Bulk Power System as stated in the FERC Policy Statement on Enforcement and the NERC Sanctions Guidelines.

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).