

Memorandum

To: ISO Board of Governors
From: Eric Schmitt, Vice President, Operations
Date: December 8, 2011
Re: Acceptance of the 2011 Operations Audit

This memorandum requires Board action.

EXECUTIVE SUMMARY

PricewaterhouseCoopers, LLC completed the California Independent System Operator Corporation Compliance Assessment Relating to Specified Control Room Operational Processes and issued its report on December 7, 2011. The compliance assessment evaluated exceptional dispatches and was completed with one exception noted. Management recommends that the Board accept the compliance assessment as submitted and proposes the following motion:

Moved, that the Board accepts the compliance assessment issued on December 7, 2011 by PricewaterhouseCoopers LLC for the testing of specified control room operational processes for 2011, as attached to the memorandum dated December 8, 2011.

BACKGROUND

In accordance with tariff section 22.1.2.2, Management engaged PricewaterhouseCoopers to perform the annual independent review of the ISO's compliance with its operations policies and procedures. In the past, Management has requested that the independent entity provide an assessment, consistent with the tariff requirements. However, as discussed at the July 2011 Board meeting, for this year's assessment Management requested that the independent auditor conduct an audit in accordance with generally accepted auditing standards and issue an opinion that the ISO's operational processes are in compliance with select operations procedures representing generally accepted good utility practice. For 2011, Management has selected the exceptional dispatch process for the scope of the audit because of its importance to market participants and its impact on operations and the market. Although exceptional dispatch is a necessary feature of ISO operation, the dispatches must be properly executed and consistent with the needs of the grid. In the past, Management implemented a multi-faceted approach to review and refine processes in order to reduce the number of exceptional dispatches. The improvement activities and results continue to date and are analyzed on a monthly basis by internal staff. However, selecting exceptional dispatch as the examination scope affords an independent assessment of whether the improved processes in place are being followed, providing valuable feedback for continuous improvement of the ISO's control room processes.

This year the audit period was expanded to include both the Alhambra and Folsom control rooms. The auditors made their observations in the Alhambra control room on September 27–29, 2011, and the Folsom control room October 17–19, 2011.

During the audit, PricewaterhouseCoopers performed the audit based on an attestation examination that results in an audit opinion. The examination included:

- The actual operations activities associated with the exceptional dispatches; and
- The validation of the information provided in the operators logs.

RESULTS

The audit focused on a total of 109 exceptional dispatches that occurred during the six day period in the day-ahead, pre-dispatch of the real-time market, and in the real-time market. The examination compared the logging requirement to the automatic dispatches and the actual market save cases for all three markets. The operator's standard process is to update his or her logs as soon as possible after the action is taken. Then, at the end of the shift, each operator is required to review his or her logs to ensure its completeness. In addition, the shift supervisor is required to review the logs of all operators on the shift he is supervising.

During the six day audit period at the two control centers there were a total of 32 initial real-time dispatches including the automatic dispatch system and verbal; 20 unit commitments and 57 secondary logs (i.e., an updated dispatch for a unit that had already been exceptionally dispatched). The one exception during the audit period was that an initial exceptional dispatch was logged with an incorrect "go to" MW instruction. The "go to" MW value of the second instruction was documented in the log in error.

The sequence of events for the exception was as follows:

1. The operator determined that a unit needed to decrease its output to reduce the loading on a nearby transmission line.

- 2. The operator instructed the unit at 15 minutes prior to the top of the hour to reduce its output from 65 MW to 64 MW. The unit started moving immediately and the operator determined that while the reduction provided some relief to the line loading, it was not enough. The operator dispatched the unit to go to 60 MW a few minutes later.
- 3. The operator logged the exceptional dispatch as instructing the unit to go from 65 MW to **60** MW. The operator logged his initial instruction entry as 60 MW, when the instruction should have been logged for 64 MW.

There is no financial impact of this log error, as the secondary instruction provided the cumulative reduction in the unit, which is the basis for compensation.

Management has reviewed the process to determine areas for improvement and has re-enforced the critical nature of the end-of-shift log review and has directed the shift supervisors to ensure that the exceptional dispatches are specifically checked at the end of each shift. In addition, review is done daily to ensure that anything logged has the correct documentation. Finally, Management will incorporate an exceptional dispatch refresher class in the training curriculum for 2012.

CONCLUSION

Management recommends that the Board accept the audit report issued by PriceWaterhouseCoopers on December 7, 2011.