

Memorandum

To: Audit Committee of the ISO Board of Governors

From: Ryan Seghesio, Chief Financial Officer & Treasurer

Date: December 11, 2013

Re: Briefing on issuance of 2013 SSAE 16 audit and scope of 2014 SSAE 16 audit

This memorandum does not require Committee action.

EXECUTIVE SUMMARY

On December 6, 2013, the California Independent System Operator Corporation issued its *SSAE 16 Type 2 Audit* (SSAE 16) for the period from October 1, 2012 to September 30, 2013 and provided it to the ISO Board of Governors, Management and market participants. The SSAE 16 audit assures market participants the ISO has sufficient internal controls over the processes and procedures of market participant charges and credits, which account for market and congestion revenue rights charges and credits, grid management charges, Federal Energy Regulatory Commission fees, transmission access charges and refunds, and reliability must-run billings.

The auditor's opinion essentially states that the internal control structure is effectively designed to provide adequate controls and that, based on their testing, the controls are in fact operating as designed. Although two exceptions were noted, they were determined to be mitigated by other control activities and had no impact on the effectiveness of the controls. Therefore, the control environment was operating effectively during the audit period.

BACKGROUND

The term *SSAE 16* derives from the auditing profession's Statement on Standards for Attestation Engagements No. 16, *Reports on the Processing of Transactions by Service Organizations*. The ISO is defined as a service organization with respect to our market participants, as market participants utilize the financial information produced by the ISO market billing systems in their own financial systems. In the SSAE 16, the ISO's independent auditor, PricewaterhouseCoopers, audits the effectiveness of the internal controls related to the ISO bid-to-bill process. Many ISO market participants have shares that trade on major exchanges governed by the Securities and Exchange Commission. They are subject to the *Sarbanes-Oxley Act*, which requires them to certify the sufficiency of their own internal controls. The ISO's SSAE 16 report allows them to comply with these reporting requirements for participating in the ISO market.

The ISO's SSAE 16 report follows the standard reporting structure for internal control reports. The report contains an assertion by Management that the control environment is effectively designed and it operated effectively during the period. The report also contains a description of the high-

level organizational control environment and a structured presentation of each of our key internal control activities that are organized around twelve control objectives. There are sixty-one key control activities supporting the control objectives which contain the auditors testing and their results. An exception in an activity can be noted by an auditor and, if not otherwise mitigated by other control activities, can lead to a qualification of the control objective.

Although exceptions were noted for two control activities, they were determined to be mitigated by other control activities and had no impact on the effectiveness of the controls. The exceptions were in activities under two different control objectives.

The first control objective with an exception in one of its activities was control objective 5, which states that controls provide reasonable assurance that ISO metered entity meter data used in settlements is accurate and complete. There are five different control activities that support this objective.

The activity with an exception was:

- Control Activity 5.1: Prior to the acceptance of data from ISO meters (prior to trade date plus 55 business days), a validation worksheet is completed which evidences successful completion of numerous data validation tests and the overall readiness of the meter to provide revenue quality meter data through the MW-90 system. The validation worksheet is reviewed and approved by the ISO Metering Engineer and the Metering Analyst.
- Exception conditions were identified with respect to six out of forty meters tested in connection with this control activity. Validation worksheets were not prepared for two of the tested meters, both of which were replacement meters. The meter data validation process was not completed and approved within the specified time period (trade date plus 55 business days) for four other meters. Meter data was not accepted into the ISO's settlements processes for these four meters until their validation process, including review and approvals, were completed.

Three other control activities mitigate this activity. They were:

- Control Activity 5.2: The ISO metered entities meter data is subject to MV-90 validation checks to detect whether data is missing or invalid. Data that fails validation is flagged by MV-90 and is reported on a task list. The Metering Analyst reviews the validation failures on a daily basis and corrects the errors as evidenced by recording the resolution in the edit log. For corrections, the ISO metered entities meter data can be compared against load patterns, schedules, meter data acquisition system load interval data, maximum output and energy management system data as appropriate.
- Control Activity 5.3: The Missing Measurements Report, which captures missing ISO metered entity meter data that has been scheduled by an entity but not received in OMAR by the required payment calendar date, is generated on a daily basis. All exceptions are investigated and resolved by the Metering Analyst.

- Control Activity 5.5: Requests for changes to the master file contractual parameters are reviewed for accuracy and completeness and approved by a Model and Contract Supervisor, as evidenced in a change management request, prior to implementation in the related application.

These control activities are preventative controls which mitigate the exception conditions. They were all tested without exception and, thus, the report concluded that the control objective was achieved.

The second control objective with an exception in one of its activities was control objective 11, which states that controls provide reasonable assurance that changes to the production environment are documented, tested and authorized. There are seven different control activities that support this objective.

The control activity with an exception was:

- Control activity 11.6: A system exists and is utilized to monitor changes made to production systems and for identifying and resolving differences between approved and non-approved versions.
- Exception conditions were identified with respect to this control activity. For twelve of thirty sample tripwire events tested, evidence of tripwire event review and change reconciliation could not be located. Seven of seventy-six SSAE 16 servers tested were not configured for monitoring within tripwire timely.

Four other control activities mitigate this activity:

- Control Activity 11.2: Change requests for the production environment are requested and approved for implementation in accordance with approved procedures.
- Control Activity 11.4: Emergency changes to the production environment are reviewed and authorized by IT Management prior to implementation.
- Control Activity 11.5: Prior to implementation into production, all requests for deployment are approved by the cross-functional change advisory board and assessed for work package completeness.
- Control Activity 11.7: On an annual basis, privileged access to systems is reviewed and reaffirmed by management to determine that access rights remain commensurate with job responsibilities and proper segregation of duties is maintained.

These control activities are preventative controls which mitigate the exception conditions. They were all tested without exception and, thus, the report concluded that the control objective was achieved.

CONCLUSION

The SSAE 16 is a comprehensive report covering our control environment. It does, however, exclude certain activities that are not subject to this control structure, such as the quality of meter data received from market participants or the control room decision-making processes.

The ISO control environment reflects the overall viewpoint, awareness, commitment and actions of the Board, Management, and market participants. Management constantly reviews activities underlying the bid-to-bill process for improvement opportunities, with process improvement as one of our top priorities.