

California ISO

PwC Report on the 2014 Market Controls Audit

Audit Committee
General Session
December 18, 2014

Agenda

Background

Results of Market Controls Audit

Scope of Report

Looking Forward

Closing Thoughts

Background

- **Purpose of report**
 - To report on the ISO's internal controls relating primarily to its market operations and settlements activities
 - Reporting under the SSAE 16 (Statement on Standards for Attestation Engagements No. 16 – Reporting on Controls at a Service Organization)
- **Expected use of report**
 - Provide assurance to market participants who rely on the ISO's controls related to the ISO's market settlements
 - The report is required by some market participants and their auditors to comply with Sarbanes-Oxley (404 Attest) requirements
- **Reporting period**
 - October 1, 2013 – September 30, 2014

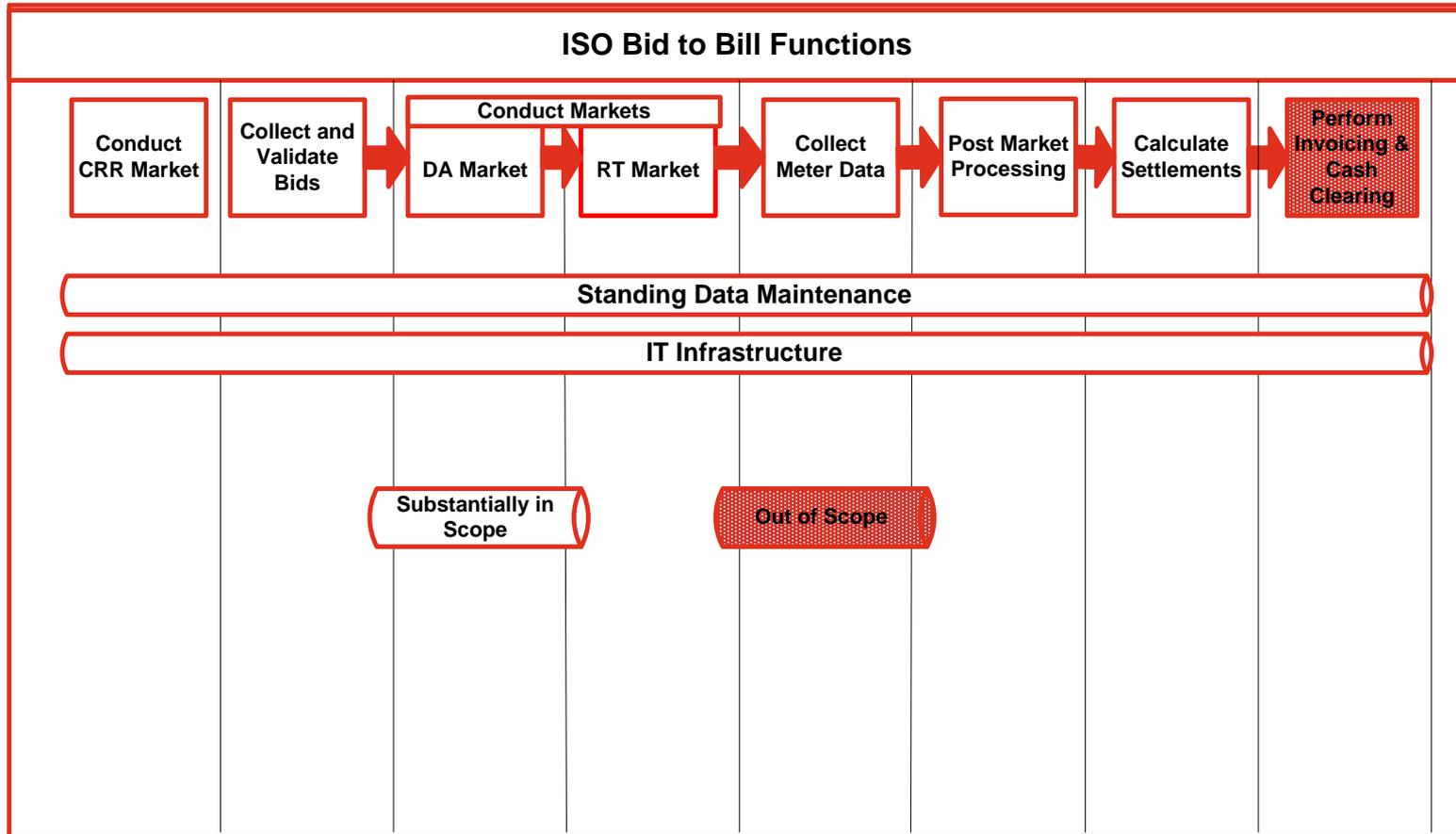
Results of Examination

- PwC opinion and report were issued to ISO management and market participants on December 5, 2014
- The opinion is unqualified
 - Management's system description is fairly stated
 - Controls were suitably designed to meet related control objectives
 - Controls were operating effectively
- Report disclosed testing exceptions for two control activities
 - Exceptions identified in the following areas:
 - Full network model maintenance (outage modeling)
 - Exceptional dispatch logging
 - Disclosed in the results section of the report
 - Testing sample size was expanded with no additional exceptions identified
 - Concluded that exceptions did not impact the effectiveness of the controls and the related control objectives, and therefore did not impact the opinion

Scope of Report

- Scope is consistent with prior year market controls report issued in December 2013
- Processes not included in the scope of report
 - Control room and operational judgments and decisions
 - Processes after the settlement statement preparation (such as invoicing and market clearing)
 - Certain other functions that are transparent to the market
 - Market changes such as EIM were considered in planning the scope of our audit; however, management determined that the new market changes had no direct impact on the control objectives or control activities within the scope of the report
- Testing of controls
 - Covers 12 main areas (the 12 control objectives)
 - Over 60 different control activities tested
 - Over 1600 transactions/items tested

Scope of Processes Covered



Audit Process Improvements

- Applied lessons learned from prior year for increased productivity
- Restructured Testing Approach
 - Adjusted timing of first phase of testing to begin after spring release to accommodate Critical Systems workload cycle
 - Applied benchmarking approach to testing of certain IT dependent controls – resulting in audit and data gathering efficiencies
- Pre-validation process through interviews with control activity owners before initiating testing of the data.
- Applied option to extend testing where single occurrences of exceptions were found which resulted in efficiencies gained in the exception evaluation and consultation process

Looking Forward

- The next attestation period has already begun – started on October 1, 2014
- PwC and ISO staff have begun planning for next year's internal controls audit
 - Continuous process improvement cycle
 - Debrief on 2014 and lessons learned for 2015
 - Recommendations related to potential controls improvement were shared with management
 - No significant changes in control environment are anticipated by management in 2015

Closing Thoughts

- The ISO continues to demonstrate a high level of ownership for the control environment and ownership of the controls report
- Benefits of the attestation include:
 - Direct assurance to market participants and their auditors
 - Internal assurance to ISO management related to market controls
 - Process improvement feedback from PwC
 - Governance coverage by ISO Board
- Questions?

Thank you

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