

***California ISO
Audit Results for the 2013
Operational Compliance
Audit***

**Audit Committee Meeting
General Session
December 18-19, 2013**

Agenda

Background

Overall Findings

General Scope of Audit

Detail Scope and Findings

Overview of Report

Closing

Operational Compliance Audit

Background

- An operational audit is performed each year.
- The 2013 audit covered the real-time scheduling function
- Management determined the subject of the assessment
 - The scope/subject varies in most years
 - Outreach to market in February, 2013
 - Audit committee briefed on the scope during May, 2013 meeting
 - PwC determined nature and extent of testing
- Our report is an Audit/Attestation opinion

Operational Compliance Audit

Overall Findings

- Over 2,000 transactions/data points were audited
- 100% compliance; no exceptions
- An unqualified opinion was issued on December 6, 2013

Operational Compliance Audit

General Scope of Audit

- Assessment period

- August 19 – 25, 2013
- September 24 – 28, 2013

- Specific Scope

- Management Assertion covering identified Procedural Elements
- Five primary Operating Procedures relate to real-time scheduling
- All Operating Procedures are available on website
- Ten specific Procedural Elements were identified from these OPs
- Objective criteria

Operational Compliance Audit

General Scope of Audit (continued)

- The ISO's real-time scheduling function

- Conducted 24x7 at both Alhambra and Folsom control rooms
- Six control room crews (operating teams) cover control room operations
- Real-time scheduling actions/functions are hourly, daily and real-time

- Audit covered

- On site observations (over 60 hours) and data inspections
- Both Folsom and Alhambra control rooms
- All clock hours
- All days in week
- Five of six shifts

Operational Compliance Audit

Detailed Scope and Findings

Ref. No.	Real-time Scheduling Operating Procedures	Occurrences During 10-Day Assessment Period	Compliance Assessment
1	Pre-Schedule and Check-Out Validation	10 daily actions; 240 hourly schedule sets; approx 2,600 data points	No Exceptions
2	E-tag Curtailments	Approx 20 occurrences	No Exceptions
3	Check-out Before the Hourly Ramp	240 hours; approx 2,600 data points	No Exceptions
4	Check-out After the Close of Each Hour	240 hours; approx 2,600 data points	No Exceptions
5	Final Daily Schedules and NAI Totals Comparison	10 days; 220 BA checkouts (110 NAI; 110 NSA)	No Exceptions

Operational Compliance Audit

Detailed Scope and Findings (continued)

Ref. No.	Real-time Scheduling Operating Procedures	Occurrences During 10-Day Assessment Period	Compliance Assessment
6	Manual Pre-Dispatch of Interchange Transactions	Approx 20 dispatches; approx 60 data points	No Exceptions
7	Manual Dispatch Interchange Accounting	Approx 20 dispatches; approx 160 data points	No Exceptions
8	Interchange Schedule Curtailments - Before the Operating Hour	Approx 20 curtailments	No Exceptions
9	Interchange Schedule Curtailments - Current Operating Hour	Zero	No Occurrences
10	Unscheduled Flow – Path 66	Approx 10 mitigations; approx 30 data points	No Exceptions

Operational Compliance Audit

Overview of Report

Report contents

- PwC unqualified opinion regarding Management's Assertion
- Management's Assertion – Summary
 - Attachment I – Detail management assertion
 - 100% compliance with 9 elements
 - One element did not occur
 - Attachment II – process narrative – unaudited

Final thoughts for 2013 Audit

- Report structure and level of assurance similar to prior years
- Subject of audit – changed – first time for real-time scheduling
- Observations – substantially more intrusive this year

Operational Compliance Audit

Closing

We appreciate ISO staff cooperation

- Big effort - several months
- Approximately 15 operators
- Management and supervisors

Questions ?