2011 ISO Lessons Learned Report
For Trade Year 2009

March 18, 2011
Executive Summary

The ISO Tariff requires Scheduling Coordinators (SCs) to annually complete a Self Audit of their Settlement Quality Meter Data (SQMD) process. The Self Audit requires the SCs to examine their meter data processes to demonstrate appropriate controls and to assure accurate reporting of SQMD and compliance with Local Regulatory Authority (LRA) requirements. Inaccurate reporting of SQMD to the ISO results in market cost shifting. The purpose of this Lessons Learned Report is to share valuable information obtained from the Scheduling Coordinator Self Audit process associated with the collection and processing of SQMD. This report includes a summary of results, practices, and recommendations associated with the collection and processing of SQMD.

The ISO uses SC-submitted SQMD along with the meter data directly acquired by the ISO, to settle the California Electric Market. The SCs that submit SQMD must assure that their data accurately and correctly represents the SC Metered Entities (end use customers connected at the distribution system) they serve as a Scheduling Coordinator. The SC Self Audit is one of the tools used to evaluate SC Tariff compliance.

In 2009, SCs faced multiple changes introduced with the implementation of Market Redesign Technology Upgrade (4/1/2009) and Payment Acceleration (11/1/2009). These changes required SCs and their Meter Data Management Agents (MDMAs) to adopt new practices associated with the processing of SQMD.

Based on this year’s reports, it appears that 2009 processes conducted by the SCs were adequate and that:

- Essential controls exist in the Market for the transfer and processing of SQMD

- SCs were able to seamlessly submit SQMD data according to the ISO Settlement Payment Calendar

- SCs identified issues with the collection of their meter data; these challenges can have a varying effect on SQMD

The SC Self Audit is only one method to evaluate the accurate reporting of SQMD and by its nature, is performed after final settlement of the Market. Therefore, the SCs should be aware that they are required, by the ISO Tariff1 to “…undertake any other actions that are reasonable (and) necessary to ensure the accuracy and integrity of the Settlement Quality Meter Data provided by them to the CAISO.”

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1 ISO Tariff, Section 10.3.10.1
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Introduction

Section 10.3.10.1 of the ISO Metering Protocol states:

“Each Scheduling Coordinator shall at least annually conduct (or engage an independent, qualified entity to conduct) audits and tests of the Metering Facilities of the Scheduling Coordinator Metered Entities that it represents and the Meter Data provided to the Scheduling Coordinator in order to ensure compliance with all applicable requirements of any relevant Local Regulatory Authority. Scheduling Coordinator shall undertake any other actions that are reasonable (and) necessary to ensure the accuracy and integrity of the Settlement Quality Meter Data (actual or Schedule Coordinator estimated) provided by them to the CAISO.”

The ISO created the Audit Guidelines specifying the areas to be audited, as well as, providing the guidelines and instructions for the Audit Report content. The Audit Guidelines, for the 2009 Trade Year, were issued during the 1st Quarter 2010.

Each SC who submits SQMD was requested to provide an Audit Plan by July 30, 2010. The Audit Plans were to include the following:

a) A general discussion of the Market activities the SC represents [i.e. Energy Service Providers (ESPs), Qualifying Facilities (QFs), Existing Contracts, etc]

b) A statement of who will conduct the audit and their qualifications

c) A general discussion on how the audit will be accomplished

d) A proposed timeline to complete the audit

The Audit Plan offers the SC an opportunity to discuss issues and concerns with the audit and to bring forth any circumstance that may hinder the completion of the audit. CAISO personnel reviewed each Audit Plan to determine if the described actions, if implemented, were sufficient to meet the ISO Tariff requirement.

The final Audit Report was due to the ISO on November 30, 2010. The evaluation consisted of determining if there was sufficient documentation to confirm that the applicable audit criteria were accomplished and that the SC management is committed to ensuring quality SQMD. If audit criteria could not be verified, a request for additional information was made to the SC. Once all requested information was received and reviewed, a letter was sent to each of the SCs identifying if the Tariff requirement was met or if additional items were needed to complete the assessment.

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2 Audit Guidelines are sent to the SCs every year with the Audit Request letter.
3 The SC Self Audit is performed after the Trade Year has been completely settled in the ISO Market.
Based on the evaluations, CAISO personnel assembled a summary of SC Identified findings and observations, located under Section 2 “Audit Results” to provide a sense of the types of issues that were identified during the Audit review. SCs are encouraged to review the list and determine if the same or similar conditions exist in their SQMD process. If so, appropriate corrective actions should be taken. In section 3, “Recommendations” contains practices associated with the processing of meter data. SCs should carefully review these items and decide if these items could possibly improve their present processes.
2. Audit Results

There were 20 SCs representing 36 individual Scheduling Coordinator IDs (SCIDs) who successfully met the CAISO Tariff SC Self-Audit requirements for the Trade Year 2009. Based on the review of the reports, it appears the SCs SQMD processes are adequate and that:

- Essential controls exist in the Market for the transfer and processing of SQMD
- SCs were able to seamlessly submit SQMD data according to the ISO Payments Calendar
- SCs identified issues with the collection of their meter data; these challenges can have a varying effect on SQMD

A number of SCs were requested to submit “Follow-up details and/or clarification surrounding a given process or particular area within the processing of SQMD. Listed below are some of the most frequent findings and observations:

- SCs expressed challenges with the collection of meter data affiliated with late posting or modifications by their Meter Data Management Agent (MDMA) resulting in resubmission of meter data after T+43C meter submittal deadline
- CAISO observed some SCs associated with a high resubmittal rate, included resources that had no alternations within their automatic resubmission process
- Several SCs noted Usage Data Reconciliation (UDR) Report was helpful with accuracy; however this information was not readily available by all UDCs
- CAISO noticed some confusion surrounding the meter submittal deadlines (T+5B, T+43C, and T+61B) and settlement impacts
3. **Recommendations**

ISO continues to challenge itself and our Market Participants to seek out and adopt good practices associated with the processing of SQMD. Listed below are some of the CAISO recommendations based on audit findings:

- Understand the various Meter Data Submittal Deadlines (T+5B, T+43C, and T+61B) and the impacts to settlement statements

- Continue training personnel on the processing of SQMD used in settlements
  - Only resubmit those resources with changes
  - Limit resource modifications to a single resubmission instance based on CAISO Payments Calendar. This will reduce the number of versions and confusion associated with a daily resubmittal practice
  - Submission of meter values should not exceed 4 decimal places (MWh)


- Review “Good Practices” located within previous Lessons Learned Reports located at: [http://www.caiso.com/docs/2005/10/01/200510011610035819.html](http://www.caiso.com/docs/2005/10/01/200510011610035819.html)

4. **Next Steps**

- ISO Energy Measurement Acquisition & Analysis (EMAA) personnel to review current practices and requirements associated with the SC Self-Audit. In collaboration with Market Participants, EMAA will focus on creating a more robust Audit process to help improve overall accuracy and efficiencies related to the processing of SQMD

- EMAA personnel to establish a working relation with the CPUC and Market Participants focusing on the impacts and benefits related to the Usage Data Reconciliation (UDR) Report and other tools, including meters installed under the Advanced Metering Infrastructure (AMI) to obtain the highest quality of SQMD possible

- EMAA team members will continue working with SCs in establishing process improvements related to the collection, processing, and submission of meter data while monitoring any anomalies related to SQMD