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		<b>Version No.</b> 2.0
		<b>Effective Date</b> 10/02/2020
<b>Meter Data Acquisition and Processing Procedure</b>		<b>Distribution Restriction: None</b>

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## Purpose

This procedure provides an outline to be followed by the Scheduling Coordinators **concerning** Settlement Quality Meter Data submission. This procedure also outlines the responsibilities of the ISO in order to collect, process, and post Meter Data.

## 1. Responsibilities

<b>ISO Metering</b>	<ul style="list-style-type: none"> <li>Collects and process Meter Data for the ISO Metered Entities (ISOME's).</li> <li>Monitor Scheduling Coordinator Metered Entities (SCME's) Meter Data submissions.</li> <li>Post Settlement Quality Meter Data (SQMD) to the Settlement Quality Meter Data System (SQMDS).</li> </ul>
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<b>Scheduling Coordinator (SC)</b>	<ul style="list-style-type: none"> <li>Represents and performs functions on behalf of the Generator Owner and/or Load Serving Entity (LSE) including data submission on behalf of their Metered Entity (SCME only).</li> </ul>
<b>Scheduling Coordinator Metered Entity (SCME)</b>	<ul style="list-style-type: none"> <li>Submit SQMD to the SQMDS in accordance with the submission standards set forth in accordance with Section 10 of the CAISO Tariff.</li> </ul>
<b>ISO Metered Entity (ISOME)</b>	<ul style="list-style-type: none"> <li>Maintain a Certificate of Compliance for their Metering Facilities in accordance with Section 10.2.4.5 of the CAISO Tariff.</li> <li>Ensure communication between the meter(s) and the ISO in order to collect Meter Data.</li> <li>Make available Revenue Quality Meter Data (RQMD).</li> </ul>

## 2. Scope/Applicability

### 2.1 Background

Meter Data is either acquired via polling of the ISO Metered Entity's (ISOME's) meters or direct submission via the Settlement Quality Meter Data System (SQMDS) by Scheduling Coordinators Metered Entities (SCME's). Scheduling Coordinators are responsible for following the rules and regulations that have been set forth in accordance with Section 10 of the CAISO Tariff and the Business Practice Manual for Metering.

### 2.2 Scope / Applicability


The procedure is intended to be used as an overview of the actions taken in order to process Meter Data from ISO Meter Entities and Scheduling Coordinator Metered Entities.

## 3. Procedure Detail

### 3.1 ISOMEs Interrogation

Before interrogation (ISO polling of ISO Metered Entity meters) and processing of Revenue Quality Meter Data (RQMD), the ISOMEs need to ensure the availability of RQMD via an approved ISO meter in accordance with the CAISO Tariff and the Business Practice Manual for Metering.

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Interrogation of the meters is necessary to collect the Meter Data from ISOMEs. Once the data is collected, it is necessary to convert it to Settlement Quality Meter Data (SQMD) by taking the following actions:

ISO Metering
<ol style="list-style-type: none"> <li>1. The ISO polls the meters using the Revenue Meter Data Acquisition and Processing System (RMDAPS), according to the ISO cycle day calendar for Meter Data since the last time polled.</li> <li>2. Once the meters have been polled, RMDAPS will identify communication issues and validation failures.</li> <li>3. If communication issues still exist at T+5B and no corrective measures have been expressed by the ISOME, the ISO will issue a non-compliance letter to the ISOME owner <u>and</u> notify the Scheduling Coordinator affiliated with such site/resource.</li> <li>4. Once the data has been validated, the RQMD is then deemed Settlement Quality Meter Data (SQMD) <u>and</u> uploaded to the Settlement Quality Meter Data System (SQMDS) by the fifth (5th) business day after the Trading Day (T+5B).</li> <li>5. If the RQMD remains unavailable as of midnight on the eighth (8th) business day after the Trading Day (T+8B), the ISO will use T+3B estimated SQMD, within settlements for ISO Metered Entities for the Recalculation Settlement Statement T+12B.</li> <li>6. If the ISO is notified that the revenue quality meter for an ISO Metered Entity requires repair, the ISO will produce SQMD for that entity using data via an approved metering exemption or through the normal Validation, Estimation, and Editing (VEE) process.</li> <li>7. The SQMD will be made available to the Scheduling Coordinator for the ISO Metered Entity within forty-eight (48) business days from the Trading Day (T+48B) for the Recalculation Settlement Statement on T+55B.</li> </ol>

ISO Metered Entity
<ol style="list-style-type: none"> <li>1. In accordance with Section 5.1.4 of the Business Practice Manual for Metering, if a certified meter of a Metered Entity requires repairs (hardware and/or communications), it is necessary to have the repairs completed within: <ul style="list-style-type: none"> <li>• Where there is no ISO Certified Backup Meter installed, <u>repairs need to be completed within 48 hours</u> of the notification by the ISO.</li> </ul> <p><b>Note:</b> A Metering Exemption may be required to continue processing Meter Data.</p> <ul style="list-style-type: none"> <li>• Where there is an ISO Certified Backup Meter installed, repairs need to be <u>completed within five Business Days</u> of the notification.</li> </ul> </li> </ol>

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### 3.2 ISOMEs Validation

Validation is performed within RMDAPS and SQMDS to ensure data integrity. Validation is used in the settlement process affiliated with ISO Metered Entities.


ISO Metering
<ol style="list-style-type: none"> <li>RMDAPS is configured to identify validation errors with corrective measures involving VEE procedures performed by a Meter Analyst in accordance with the BPM guidelines.  <b>Note:</b> <i>The criteria used to perform VEE can be found in the ISO BPM for Metering Attachment D.</i></li> <li>Before data is posted on the SQMDS it undergoes validation to ensure correct formatting and active contracts.</li> <li>Once the Meter Data has been posted to SQMDS it is gathered for market settlement processing: <ul style="list-style-type: none"> <li>Payment dates are determined by the ISO Settlements Payment Calendar located at <a href="http://www.caiso.com/market/Pages/Settlements/Default.aspx">http://www.caiso.com/market/Pages/Settlements/Default.aspx</a>.</li> </ul> <b>Note:</b> <i>Settlements will be conducted under Section 11 (ISO Settlements and Billing) of the CAISO Tariff.</i> </li> </ol>

### 3.3 Scheduling Coordinators SQMD Access

Scheduling Coordinators, who represent ISOME's and SCME's, may access Meter Data in accordance with the CAISO Tariff and the BPM Metering requirements.

Scheduling Coordinators may directly access the Meter Data for the Metered Entities they represent via the Settlement Quality Meter Data Systems (SQMDS).

Scheduling Coordinator
<ol style="list-style-type: none"> <li>Request a digital certificate to access the SQMDS by submitting an Application Access Request Form.</li> <li>Scheduling Coordinators may view SQMD on or before five (5) business days from the Trading Day (T+5B) for successfully polled meters where RQMD was obtained from ISO Metered Entities.</li> </ol>

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### 3.4 Scheduling Coordinators for SCMEs

#### 3.4.1 SC Data Submission for SCMEs

Scheduling Coordinators representing Scheduling Coordinator Metered Entities shall submit data in accordance with the requirements set forth in Section 10.3 *Metering for Scheduling Coordinator Metered Entities* of the CAISO Tariff:

Scheduling Coordinators are responsible for submission of the SQMD for their respective Scheduling Coordinator Metered Entity per CAISO Tariff and the BPM for Metering requirements.

Scheduling Coordinator
<ol style="list-style-type: none"> <li>1. Scheduling Coordinators may <b>submit</b> Actual SQMD or SC Estimated SQMD for the entities they represent; however, that data <u>will not</u> be used for the T+3B Settlement Statement. <ul style="list-style-type: none"> <li>• The ISO estimates all Meter Data for the T+3B Settlement Statement.</li> </ul> </li> <li>2. Actual SQMD or Estimated SQMD <b>must be submitted no later than midnight on T+8B</b> for the Recalculation Settlement Statement at T+12B calculation. <ul style="list-style-type: none"> <li>• In the absence of SQMD, estimated data used at T+3B will remain.</li> </ul> </li> <li>3. SQMD that is estimated by the ISO and not replaced with Actual SQMD by the SC by T+48B will be set to zero for the T+55B Settlement Statement.</li> <li>4. Scheduling Coordinators <b>must submit</b> Actual SQMD for the Scheduling Coordinator Metered Entities they represent to the ISO <u>no later than midnight</u> on the forty-eighth (48th) business day after the Trading Day (T+48B) for the Recalculation Settlement Statement at T+55B: <ul style="list-style-type: none"> <li>• If the Scheduling Coordinator has submitted SC Estimated SQMD for T+12B, they may <b>resubmit</b> Actual SQMD for T+55B no later than T+48B.</li> <li>• If Actual SQMD is not received by the ISO for a Scheduling Coordinator Metered Entity by T+48B, the Scheduling Coordinator is subject to monetary penalty under Section 37.5.2.1 of the ISO Rules of Conduct.</li> <li>• Any SC Estimated SQMD submitted that is not replaced with Actual SQMD by T+48B is subject to monetary penalty and the SC Estimated SQMD will be used in the Recalculation Settlement Statements.</li> </ul> </li> <li>5. Scheduling Coordinators may <b>submit</b> Actual SQMD for the Scheduling Coordinator Metered Entities they represent to the ISO from up to T+172B for use in the Recalculation Settlement Statement T+9M: <ul style="list-style-type: none"> <li>• Any SQMD submitted for use in the Recalculation Settlement Statement T+9M is subject to monetary penalty under Section 37.5.2 of the ISO Rules of Conduct.</li> </ul> </li> </ol>

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### 3.5 Missing Meter Data Process for Scheduling Coordinator Metered Entities

The missing Meter Data process is performed to determine if there are any exceptions for Scheduling Coordinator Metered Entity Actual SQMD not submitted by T+48B.

ISO Metering
<ol style="list-style-type: none"> <li><b>Perform</b> the missing Meter Data process on T+49B for any exceptions from T+48B.</li> <li>For any exceptions that are found, the ISO will <b>send</b> a courtesy notification to Scheduling Coordinators.</li> </ol>

Scheduling Coordinator
<ol style="list-style-type: none"> <li>If exceptions are found, it is necessary for the Scheduling Coordinator to <b>submit</b> the missing Meter Data up to T+172B.           <ul style="list-style-type: none"> <li><i>Subject to Section 37.5.2.1 of the ISO Rules of Conduct.</i></li> </ul> </li> </ol>

## 4. Supporting Information

### Operationally Affected Parties

Shared on the Internet.

### References

Resources studied in the development of this procedure and that may have an effect upon some steps taken herein include but are not limited to:

CAISO Tariff	Sections 10.2, 10.3, 11, 37, and Appendix A
<a href="#">Business Practice Manual for Metering</a>	Section 5.1.4 and Attachment D


### Definitions

Unless the context otherwise indicates, any word or expression defined in the Master Definitions Supplement to the CAISO Tariff shall have that meaning when capitalized in this Operating Procedure.

The following additional terms are capitalized in this Operating Procedure when used as defined below:

<b>SQMD</b>	Settlement Quality Meter Data
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<b>RQMD</b>	Revenue Quality Meter Data
<b>VEE</b>	Validation, Estimation, and Editing
<b>RMDAPS</b>	Revenue Meter Data Acquisition & Processing System
<b>SQMDS</b>	Settlement Quality Meter Data Systems
<b>ISO Metered Entity</b>	See CAISO Tariff Appendix A, Master Definitions Supplement
<b>Scheduling Coordinator Metered Entity</b>	A Generator, Eligible Customer or End-User that is not an ISO Metered Entity.

### Version History

Version	Change	Date
1.0	Initial document	11/19/13
1.1	Periodic Review – no content changes. Updated logo in header and formatting.	5/23/16
1.2	Updated to reflect current processes regarding the polling of meters and non-communication with meters.	10/07/16
1.3	Changes relating to the decommissioning of OMAR Online and the implementation of MRI-S. Replaced CAISO with ISO in most instances. Minor format and grammar updates.	2/14/18
2.0	Periodic Review: Updated Review Criteria, removed Technical Review and Approval section, and added document controlled footer for consistency with other procedures. Minor format and grammar updates.	10/02/20

## 5. Periodic Review Procedure


### Review Criteria & Incorporation of Changes

There are no specific criteria for reviewing or changing this document, follow instructions in ISO Operating Procedure 5510.

### Frequency

Every three (3) years.

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## Appendix

No references at this time.