

10.1 General Provisions

An entity seeking to provide or process Energy, Demand, or Ancillary Services in the CAISO Markets must provide the CAISO with Meter Data. Based upon its eligibility and election, an entity provides the CAISO with either (a) Revenue Quality Meter Data as a CAISO Metered Entity or (b) Settlement Quality Meter Data as a Scheduling Coordinator Metered Entity. Pursuant to Section 10.2, the CAISO directly polls CAISO Metered Entities' certified revenue quality meters to acquire Revenue Quality Meter Data. Pursuant to Section 10.3, Scheduling Coordinators for Scheduling Coordinator Metered Entities collect and provide the CAISO with Settlement Quality Meter Data.

10.1.3.1 Permitted Netting

CAISO Metered Entities and Scheduling Coordinators may, when providing Meter Data to the CAISO, net ~~kWh~~ or MWh values for Generating Unit output and auxiliary Load equipment electrically connected to that Generating Unit at the same point provided that the Generating Unit is on-line and is producing sufficient output to serve all of that auxiliary Load equipment. For example, where a Generating Unit's auxiliary Load equipment is served via a distribution line that is separate from the switchyard to which the Generating Unit is connected, that Generating Unit and auxiliary Load equipment will not be considered to be electrically connected at the same point.

10.2.4.4 Certificate of Compliance

If the Metering Facilities satisfy the certification criteria as specified in this CAISO Tariff and in the Business Practice Manuals (after taking into account any exemptions to the certification criteria granted by the CAISO), the CAISO will issue a Certificate of Compliance ~~in respect~~ of those Metering Facilities ~~and provide the original Certificate of Compliance to the CAISO Metered Entity that requested the certification of those Metering Facilities.~~

10.2.5.2 Current Certificates

It is the responsibility of the relevant CAISO Metered Entity to ensure that any inspector it engages to undertake the certification of its Metering Facilities ~~holds a current certificate of approval issued by the~~

~~CAISO which authorizes that inspector to carry out the duties of~~ a CAISO Authorized Inspector at the time of inspection.

10.2.6 Metering Communications

The CAISO's RMDAPS shall collect and process Revenue Quality Meter Data made available by CAISO Metered Entities pursuant to Meter Service Agreements for CAISO Metered Entities and the applicable Business Practice Manual. Revenue Quality Meter Data for CAISO Metered Entities shall be made available to the CAISO's RMDAPS as specified in the applicable Business Practice Manual ~~either~~ directly by the CAISO Metered Entity ~~or via a central data server which collects Revenue Quality Meter Data for various CAISO Metered Entities provided that the central data server does not aggregate or adjust that data.~~ Revenue Quality Meter Data on the CAISO's RMDAPS may be provided or made accessible to other CAISO systems as deemed necessary by the CAISO, subject to the CAISO being satisfied that such access by such authorized uses and/or systems will not adversely ~~a~~ffect the security of the data held by the CAISO. CAISO Metered Entities shall ensure that their Metering Facilities are compatible with the CAISO's RMDAPS for these purposes. The CAISO may, at its discretion, exempt a CAISO Metered Entity from the requirement to make Revenue Quality Meter Data directly available to the CAISO's RMDAPS, for example, where the installation of communication links is unnecessary, impracticable or uneconomic. The CAISO shall maintain the RMDAPS and remedy any faults occurring in such system. Scheduling Coordinators and other authorized users requiring Settlement Quality Meter Data for CAISO Metered Entities on whose behalf they Bid may obtain such data by accessing the CAISO's Settlement Quality Meter Data Systems in accordance with the CAISO Tariff and applicable Business Practice Manuals. Scheduling Coordinators and other authorized users shall not poll the CAISO revenue meters for any other purpose, unless specifically authorized in the Meter Service Agreement for CAISO Metered Entities.

10.2.8.1 Meter Site Security

Metering Facilities of CAISO Metered Entities ~~(including communications devices)~~ and secondary devices that could have any impact on the performance of the Metering Facilities must be sealed by the CAISO or a CAISO Authorized Inspector.

10.3.2.2 Format for Data Submission

Scheduling Coordinators shall submit Settlement Quality Meter Data to the Settlement Quality Meter Data System for the Scheduling Coordinator Metered Entities they represent using one of the CAISO's approved Meter Data Exchange Formats. Subject to any exemption granted by the CAISO, Scheduling Coordinators must ensure that Settlement Quality Meter Data submitted to the CAISO is in intervals of five (5) minutes for EIM Interties, Loads providing Ancillary Services and/or Imbalance Energy, and Generators providing Ancillary Services and/or Imbalance Energy, and one (1) hour for other Scheduling Coordinator Metered Entities. Scheduling Coordinators for EIM Participating Resources or for Generators not providing Ancillary Services or Imbalance Energy may elect to submit Meter Data in 5-minute or 15-minute intervals. Scheduling Coordinators for all other Scheduling Coordinator Metered Entities may elect to submit Meter Data in 5-minute, 15-minute, or 60-minute intervals. Elections will be recorded by the CAISO, and may not be deviated from or revised except by application. The elected interval may not be a granularity lower than what may be programmed on the Scheduling Coordinator Metered Entity's physical meter(s) or as specified in the applicable Business Practice Manual. ~~Where the Scheduling Coordinator does not provide Meter Data in 5-minute intervals, the CAISO will divide and average the Meter Data into 5-minute intervals for settlement purposes.~~

Each Scheduling Coordinator shall submit Settlement Quality Meter Data in kWh or MWh values for all of the Scheduling Coordinator Metered Entities for which it is responsible, that it schedules aggregated by the applicable market or resource level:

- ~~(a) — LAPs and PNodes, as applicable; and~~
- ~~(b) — the relevant PNode for Generating Units.~~

10.3.2.3 Format for Data Requests

Scheduling Coordinators may obtain Settlement Quality Meter Data relating to the Scheduling Coordinator Metered Entities they represent by requesting extracts from the CAISO's Settlement Quality Meter Data Systems using the Meter Data request formats as published in the Business Practice Manuals. The CAISO will ensure that such data is made available in a timely manner.

10.3.7.1 SQMD Plan

For Scheduling Coordinator Metered Entities that were not participating as such before [[proposed effective date]], or that repower, modify their Meter Data interval, or add generating capacity after [[proposed effective date]], Scheduling Coordinators must submit an SQMD Plan to ensure that the Scheduling Coordinator will submit and maintain the integrity of Meter Data submitted to the CAISO for that Scheduling Coordinator Metered Entity. The SQMD Plan will describe how the Scheduling Coordinator will collect, maintain, aggregate, and submit Settlement Quality Meter Data in accordance with CAISO Tariff and, where applicable, Local Regulatory Authority metering and settlement standards. SQMD Plans will include detailed descriptions of the following, as applicable, for each Scheduling Coordinator Metered Entity or Scheduling Coordinator Metered Entity aggregation or calculation:

- (1) The type, programming, and configuration of all associated metering devices;
- (2) How the Scheduling Coordinator or its agent will collect, validate, aggregate, and submit associated Meter Data;
- (3) Single-line diagrams with professional engineer stamps (or equivalent) depicting the physical elements and relationships among the metering device(s);
- (4) Any calculation or algorithm to derive Settlement Quality Meter Data from the metering device(s);
- (5) Processes for aggregating individual Scheduling Coordinator Metered Entities and Resource IDs; and
- (6) Plans and schedules to perform regular tests of the metering devices and audit the associated Meter Data pursuant to CAISO Tariff requirements.

Proxy Demand Resources and Reliability Demand Response Resources may satisfy ~~the~~their SQMD Plan requirements through the demand response registration process.

10.3.7.2 CAISO Review of SQMD Plan

The CAISO must approve a Scheduling Coordinator Metered Entity's SQMD Plan before the Scheduling Coordinator may submit Bids on its behalf in the CAISO Markets.

10.3.7.3 SQMD Plan Modifications

Scheduling Coordinator Metered Entities may propose for CAISO approval modifications to approved SQMD Plans. So long as the Scheduling Coordinator Metered Entity remains in compliance with its existing SQMD Plan, or where the proposed modification intends to bring the Scheduling Coordinator Metered Entity into compliance, the associated Scheduling Coordinator may continue to submit Meter Data for settlement while the CAISO reviews the SQMD Plan modifications.

10.3.7.4 SQMD Plan Audits and CAISO Remedies

In addition to the CAISO's audit rights pursuant to this Section 10, the CAISO may perform audits or inspections to ensure that Scheduling Coordinators and Scheduling Coordinator Metered Entities have implemented and comply with their SQMD Plans. Based on an audit, inspection, or other information, the CAISO will determine whether the Scheduling Coordinator Metered Entity must modify its SQMD Plan or is subject to penalty under the CAISO Tariff, including conversion to a CAISO Metered Entity.

10.3.7.5 Annual Affirmation

In addition to the auditing and testing requirements contained in its SQMD Plan, on an annual basis the Scheduling Coordinator Metered Entity must perform a self-assessment and affirm to the CAISO, in writing, that it has implemented and continues to comply with its SQMD Plan. Where the Scheduling Coordinator Metered Entity performs a self-assessment and determines that it will not be able to affirm its compliance to the CAISO, the Scheduling Coordinator Metered Entity will describe the issue to the

[CAISO and its plan to remedy the issue. The associated Scheduling Coordinator may continue to submit Meter Data for settlement while the CAISO reviews the plan to remedy the issue.](#)

10.3.10 Requirement For Audit And Testing

10.3.10.1 Audit and Testing by Scheduling Coordinator

[At least every two years](#), ~~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 [and the Scheduling Coordinator Metered Entity's SQMD Plan](#). Scheduling Coordinators shall undertake any other actions that are reasonably ~~ne~~ necessary to ensure the accuracy and integrity of the Settlement Quality Meter Data (actual or Scheduling Coordinator estimated) provided by them to the CAISO.

10.3.11 Scheduling Coordinator To Ensure Certification

If the relevant Local Regulatory Authority has not prescribed any certification criteria for the Metering Facilities of a Scheduling Coordinator Metered Entity, the Scheduling Coordinator representing that Scheduling Coordinator Metered Entity must promptly notify the CAISO in writing that no such criteria have been prescribed. [Where applicable, this notification may be included in the Scheduling Coordinator Metered Entity's SQMD Plan](#). ~~That Scheduling Coordinator will then be responsible for ensuring that the Scheduling Coordinator Metered Entities it represents obtain and maintain Certificates of Compliance in respect of all of the Metering Facilities of those Scheduling Coordinator Metered Entities in accordance with Section 10.3.9. Scheduling Coordinators must engage a CAISO Authorized Inspector to perform the certification of any Metering Facilities that are to be certified under the CAISO Tariff.~~ Consistent with Section 10.3.9, Scheduling Coordinators of a Distributed Energy Resource Aggregation for which no Local Regulatory Authority criteria have been prescribed for Metering Facilities may self-certify that their Metering Facilities meet the default certification criteria set forth in the CAISO Business Practice Manual [or their SQMD Plan](#), ~~and need not engage a CAISO Authorized Inspector to perform the certification of~~

~~Metering Facilities of Distributed Energy Resources comprising their Distributed Energy Resource Aggregation(s).~~

10.3.11.1 Confirmation of Certification

On the written request of the CAISO, each Scheduling Coordinator must give the CAISO written confirmation that the Metering Facilities of each Scheduling Coordinator Metered Entity that it represents are certified in accordance with either the criteria of the relevant Local Regulatory Authority, [the Scheduling Coordinator Metered Entity's SQMD Plan](#), and/or the criteria prescribed by the CAISO Tariff and Business Practice Manuals within five (5) Business Days of receiving a request from the CAISO.

10.3.14.1 UDC and TO Agreements

Each Scheduling Coordinator shall be responsible for obtaining any necessary consent from the UDCs on whose Distribution Systems or the Participating TOs on whose transmission facilities the Scheduling Coordinator has Scheduling Coordinator Metered Entities as is necessary to give effect to the procedures governing Meter Data validation and security and inspection and testing of Metering Facilities.

Scheduling Coordinators must verify with the relevant UDC and/or Participating TO the identity of each Scheduling Coordinator Metered Entity they represent and must notify the UDC and/or Participating TO of any discrepancies of which they become aware. [Where UDCs or Participating TOs serve adjacent service areas and have elected to submit Settlement Quality Meter Data at the intratie\(s\), they will be required to agree on the metering configurations used for submitting Meter Data to the CAISO. If they cannot reach an agreement, the intratie\(s\) will be a CAISO Metered Entity and subject required to use revenue quality meters directly polled by the CAISO pursuant to Section 10.2.](#)

4.5.3 Responsibilities Of A Scheduling Coordinator

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4.5.3.15 SQMD Plan

Complying with the SQMD Plan for eligible entities it serves pursuant to Section 10.3.7.

Appendix A

- CAISO Metered Entity

Pursuant to Section 10.1, an eligible entity that has elected that the CAISO will collect and process its Revenue Quality Meter Data directly from CAISO certified revenue quality meters. Eligible entities include:

- (a) any one of the following entities that is directly connected to the CAISO Controlled Grid:
 - i. a Generator other than a Generator that sells all of its Energy (excluding any Station Power that is netted pursuant to Section 10.1.3) and Ancillary Services to the Utility Distribution Company or Small Utility Distribution Company in whose Service Area it is located;
 - ii. an MSS Operator; or
 - iii. a Utility Distribution Company or Small Utility Distribution Company; and
- (b) any one of the following entities:
 - i. a Participating Generator;
 - ii. a Participating TO in relation to its Tie Point Meters with other TOs or Balancing Authority Areas;
 - iii. a Participating Load;
 - iv. a Participating Intermittent Resource;
 - v. an EIM Participating Resource ~~that has elected not to be a Scheduling Coordinator Metered Entity, with regard to the EIM Resources it specifies that it represents as a CAISO Metered Entity~~; or
 - vi. a utility that requests that Unaccounted For Energy for its Service Area be calculated separately, in relation to its meters at points of connection of its Service Area with the systems of other utilities.

- Scheduling Coordinator Metered Entity

Pursuant to Section 10.1, An eligible entity that has elected that its Scheduling Coordinator will process and submit its Settlement Quality Meter Data to the CAISO. Eligible entities include:

- i. a Generator, including Participating Generators and QFs;
- ii. a Utility Distribution Company or Small Utility Distribution Company;
- iii. a Participating Intermittent Resource;
- iv. an EIM Entity or EIM Participating Resource;
- v. a Proxy Demand Resource or Reliability Demand Response Resource;
- vi. a Distributed Energy Resource;
- vii. an End User;
- viii- a utility that requests that Unaccounted For Energy for its Service Area be calculated separately, in relation to its meters at points of connection of its Service Area with the systems of other utilities; and
- ix. Tie Point Meters with other Transmission Owners or Balancing Authority Areas.

~~that is (1) a Generator, Eligible Customer, End-User, Reliability Demand Response Resource, or Proxy Demand Resource that is not a CAISO Metered Entity; (2) an EIM Entity; and (3) an EIM Participating Resource that elects to be a Scheduling Coordinator Metered Entity with regard to some or all of the EIM Resources it represents.~~

- SQMD Plan

A document submitted to the CAISO for Scheduling Coordinator Metered Entities that details how the Scheduling Coordinator will collect, maintain, aggregate, process, and submit Settlement Quality Meter Data in accordance with applicable CAISO Tariff and, where applicable, Local Regulatory Authority metering and settlement standards.