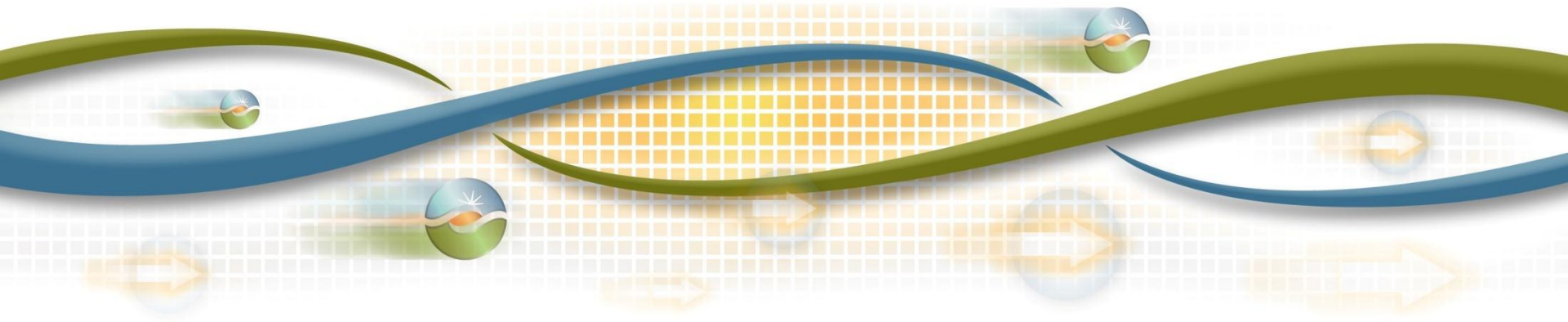




Metering Rules Enhancements

Revised Straw Proposal

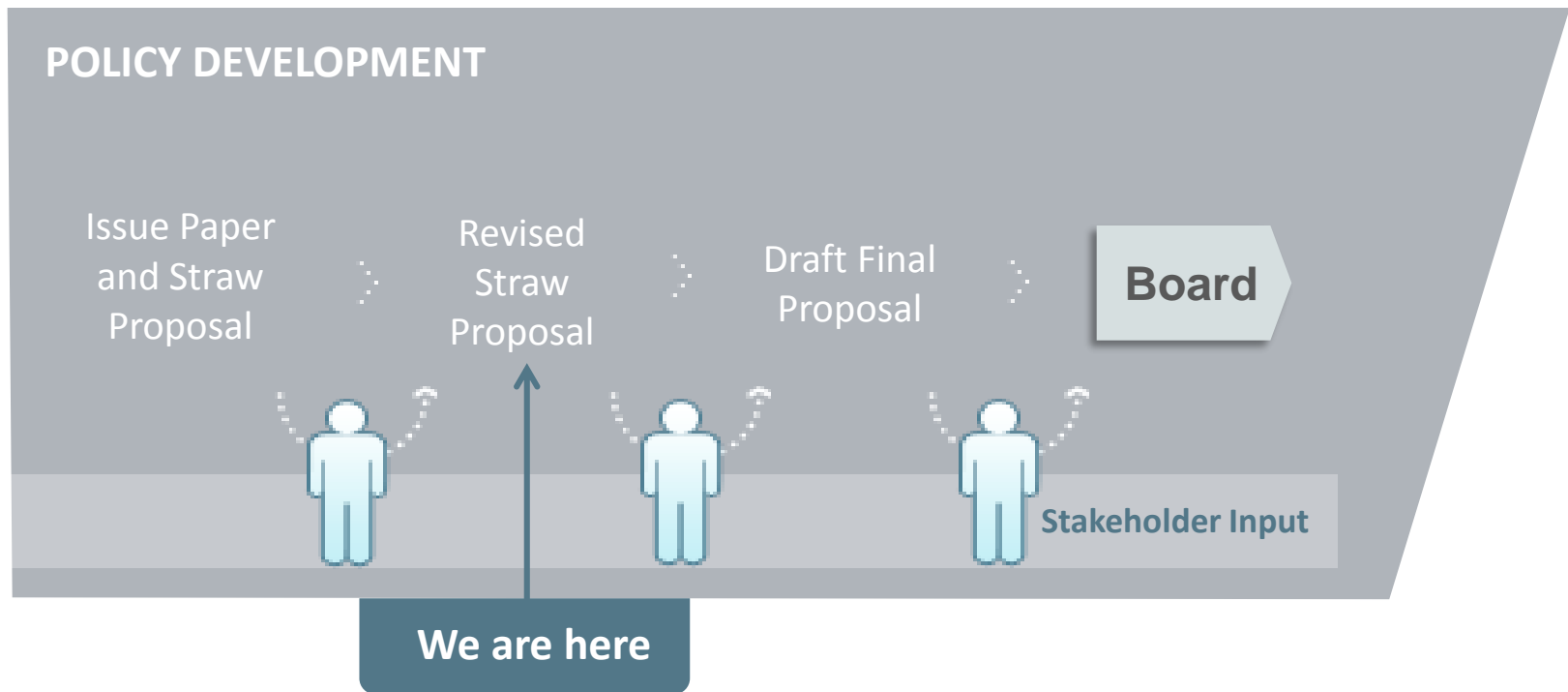
Stakeholder web conference
April 26, 2016
9:00 – 12:00 (Pacific Time)



Agenda

Time	Agenda Item	Speaker
9:00-9:10	Introduction, stakeholder process	Tom Cuccia
9:10-9:20	Initiative background	Tom Flynn
9:20-9:45	Existing metering requirements	Mike Russell
9:45-11:50	Revised straw proposal	Mike Russell
11:50-12:00	Next Steps	Tom Cuccia

ISO Stakeholder Initiative Process



Stakeholder process schedule

Step	Date	Event
Issue Paper and Straw Proposal	February 23	Post issue paper and straw proposal
	March 3	Stakeholder web conference
	March 17	Stakeholder comments due
Revised Straw Proposal	April 19	Post revised straw proposal
	April 26	Stakeholder web conference
	May 10	Stakeholder comments due
Draft Final Proposal	June 7	Post draft final proposal
	June 14	Stakeholder web conference
	June 28	Stakeholder comments due
Board Approval	Aug. 31 – Sep. 1	Board of Governors meeting

Initiative background

Focus is on meter data used in market settlements not operations

- This initiative addresses the process used by the ISO, ISO metered entities (ISOME), and scheduling coordinators (SC) for SC metered entities (SCME) to obtain settlement quality meter data (SQMD) used for settlement of ISO market.
- This initiative does not address meter or telemetry data used in operations.

An evolving industry is driving the need for continuous review of metering requirements and rules

- Through previous initiatives, ISO has made/proposed revisions to its metering requirements to accommodate changes in the energy landscape.
 - Demand response
 - Energy Imbalance Market
 - Aggregations of distributed energy resources
- Expanded use of Scheduling Coordinator Metered Entities (SCME)
- Through this initiative, ISO will propose further enhancements to accommodate additional change.
 - Allow SCs the option to submit SQMD for SCME resources represented.
 - Change an ISOME requirement associated with a particular exemption request.

Development of enhanced metering requirements necessitates balancing multiple objectives

- Provide market participants with metering flexibility
- Reduce cost barriers to participate in the ISO market
- Accommodate new and complex metering configurations
- Integrate other BAAs into the ISO
- Leverage local regulatory authority metering requirements
- Consider investments made in existing metering infrastructure
- Maintain accuracy and integrity of meter data used in market settlements

Existing metering requirements

Settlement quality meter data (SQMD)

- ISO market settlement requires SQMD for generation, load, and tie resources.
- SQMD is obtained from two different sources:
 - ISO metered entities (ISOME)
 - Scheduling coordinator metered entities (SCME)

ISO metered entities (ISOME)

- ISO certifies ISOME revenue quality meters.
- ISOME revenue quality meters are directly polled by the ISO.
- ISO takes the raw unedited meter data and performs the validation, estimation, and editing (VEE) procedures to produce SQMD.
- ISOME signs a meter service agreement with ISO.

ISOME consist of the following examples

- Generators (other than a generator that sells all of its energy and ancillary services to the UDC or Small UDC in whose service area it is located);
- Metered Subsystems (MSS);
- UDCs and Small UDCs;
- Participating resources and EIM participating resources that elect not to be SCME; and
- Utilities that request to have their own Unaccounted for Energy (UFE) calculation.

Scheduling Coordinator Metered Entities (SCME)

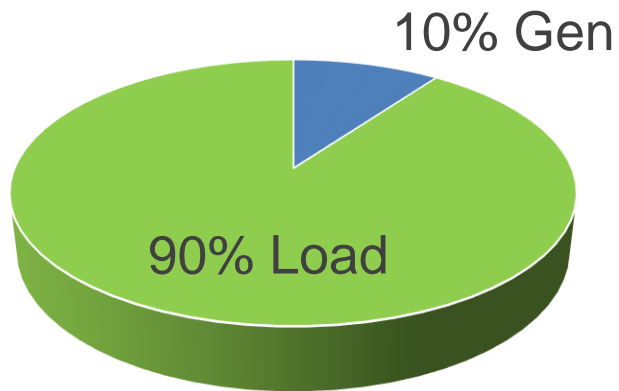
- SCME metering facilities are certified in accordance with criteria prescribed by the relevant local regulatory authority (LRA).
 - If none, then certification criteria prescribed for ISOME apply.
- SC for SCME submits SQMD to the ISO.
- SC for SCME are responsible for obtaining LRA approval of its proposed security and VEE procedures (ISO does not perform VEE).
- SC must perform an annual self-audit.
- SC for SCME signs a meter service agreement.

SCME consist of the following examples

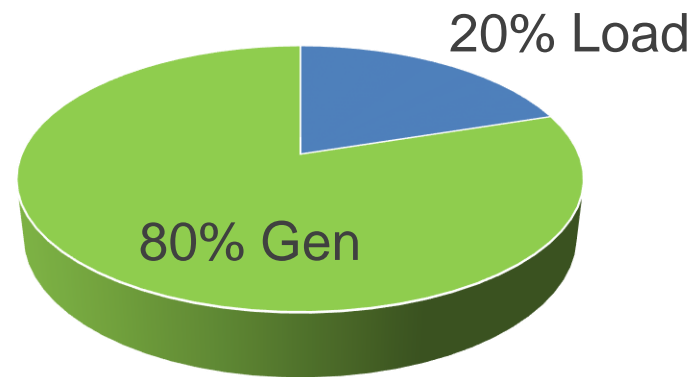
- A Generator, Eligible Customer, End-User, Reliability Demand Response Resource (RDRR), or Proxy Demand Resource (PDR) that is not an ISOME;
- An EIM Entity; or
- An EIM Participating Resource that elects to be a SCME with regard to some or all of the EIM Resources it represents.

SCME vs. ISOME: Participation Breakdown

SCME



ISOME



Revised Straw Proposal

Summary of revised straw proposal

1. Provide existing metered entities the option to retain current requirements and maintain their status quo, or instead to opt for (2) and (3).
2. Allowing SCs the option to submit SQMD for SCME resources represented.
3. Require submittal of a SQMD Plan by SCs opting to submit SQMD for SCME resources represented.
4. Change an ISOME requirement associated with a particular exemption request.

Provide existing metered entities the option to maintain status quo

- Recognizes investments made in existing metering infrastructure.
- Existing ISOME and SCME not required to change or take advantage of new option.
- Submission of SQMD Plan not required.

Allow SCs the option to submit SQMD for SCME resources represented (load, generation and tie resources)

Under this option SCs would be able to:

- Acquire, process, and submit SQMD for generation resources they represent.
- Acquire, process, and submit SQMD for their load resources by following the requirements of an applicable LRA, or by calculating their load from qualified tie meters and generator meters.
- Process and submit SQMD for tie resources when the interchange checkout data is unavailable.

Allow SCs the option to submit SQMD for SCME resources represented – *continued*

- Existing SCME metering requirements will apply.
- No new size restrictions imposed on SCMEs.
- SCs that elect to take advantage of this option will be required to develop and submit an SQMD Plan.
- ISOME possessing an exemption may opt to become SCME and document in SQMD Plan.
- Following implementation of proposal, all new market participants (including those electing to participate in EIM) that choose SCME would not need to request an exemption but would instead submit an SQMD Plan.

Allow SCs the option to submit SQMD for SCME resources represented – *continued*

Three options for SQMD submission at UDC-to-UDC intratie points:

- Put responsibility on adjacent UDCs to come to agreement on metering used;
- Make it an explicit tariff requirement that adjacent UDCs must come to agreement on metering used; or
- Require that UDCs that wish to obtain their own UFE calculations are ISOME (ISO would not allow SCs representing such UDCs to submit SQMD).

Require submittal of an SQMD Plan by SCs opting to submit SQMD for SCME resources represented

- Provides SC opportunity to demonstrate that the meter data submitted to ISO will be settlement quality.
- SC must submit an annual self-assessment where its management attests to implementation/adherence.
- ISO reserves right to perform audits and inspections on the implementation and use of each SQMD Plan.
- Any SQMD Plan that proves inadequate is subject to revision to ensure it produces SQMD.
- ISO is suggesting it have 20 business days to review a submitted SQMD Plan.
 - Review would begin upon receipt of a complete SQMD Plan.

ISO has developed a draft SQMD Plan for stakeholder consideration

- A draft SQMD Plan was attached to the revised straw proposal.
- Topics addressed include: responsibility, agreements, market participation, quality assurance, audits, and corrective actions.
- ISO invites stakeholders to comment on the draft.
- ISO is interested in whether the draft captures all relevant topics.

Modification of an ISOME requirement associated with a particular exemption request

- Certain exemption requests frequently requested and granted may indicate where a change in the associated ISOME requirement merits consideration.
- Tariff section 10.2.6 requires that RQMD be provided to ISO directly; however, ISO may exempt an entity from this requirement if installation of communication links is unnecessary, impracticable or uneconomic.
- ISO proposes to allow communication of meter data via any available method provided appropriate security and/or encryption of the data exists and is verified to be in place for the method chosen.

Next Steps

Request stakeholder comments by COB May 10th

Be sure to use comments template provided

Submit to comments mailbox:
initiativecomments@caiso.com

Step	Date	Event
Revised Straw Proposal	April 19	Post revised straw proposal
	April 26	Stakeholder web conference
	May 10	Stakeholder comments due

Thank you!