Welcome
Our presentation will begin shortly.

Today’s Presenter: Priyanka Namburi, Senior Advisor
Housekeeping

Keep yourself muted to minimize background noise

Unmute to ask verbal questions or write questions in the chat pod

Raise your hand using WebEx interactivity tools

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Objectives

- Metering and Telemetry Documentation
- Telemetry Data Validation
- Telemetry Non-Compliance/Exemptions
- WREGIS
- Webpage Walkthrough
Energy Data Acquisition Specialist Team (EDAS) is responsible for engineering requirements and standards for:

- Revenue Metering via:
  - Approved CAISO Meters
  - CAISO Inspected and Certified
  - CAISO Meter data processing
  - Settlement Quality meter data (SQMD) plans

- Direct Telemetry via:
  - Distributed Network Protocol (DNP) devices
Required Documents

Bucket 1

- Single and Three line drawings
  - Device IDs generated after acceptance of these documents.
  - A Few Helpful Hints:
    - CAISO Meters clearly labeled
    - Drawings have Professional Engineer stamp
    - Checklist
- Communications Block Diagram
  - A Few Helpful Hints:
    - No Word document format submittals
    - Checklist
- Remote Intelligent Gateway (RIG) Details Form
  - Checklist
Required Documents (Cont.)

Buckets 2 & 3

- **Bucket 2** – Meter Configuration Worksheet
  - Provides Meter configuration details to the CAISO

- **Bucket 3**
  - 24/7 Contact Form
  - Certification Practice Statement for Basic Assurance Certification Authority (CPS) Agreement
  - Energy Communications Network (ECN) Agreement

Once Buckets 1 thru 3 are Complete
- Site Schedules Point to Point testing
Required Documents (Cont.)

- Bucket 5
  - Meter and Site Verification Sheet (MSVS)
  - Point of Receipt (POR) Calculation (If applicable)
- Meter Exemption and Metering Scheme Overview
- EDAS Commercial Operation Date (COD)
  - Metering (CAISO Polled Meters)
    - Certificate of Compliance (COC)
      - Issued after Bucket 5
      - Meter must have valid actual recorded data
  - Telemetry
    - 72 hour communications check
Common Issues

- Address mismatch
- Missing project numbers on SLD/3LD
- Incorrect seals numbers
- Meter Identification
- Incorrect emails address on MSVS/Meter Maintenance forms
- Load/Standby provider information incorrect
Common Issues

- Incomplete pretesting
- Incorrect meter configuration worksheets
- Unable to test from the source device
- Frequency Response points not ready
Common Issues

- Resource not generating
- SOC/MXENERGY Oscillations
- Frequency response point scaling
- Mirrored values
- UCON Issue
Telemetry Non-Compliance

- Telemetry BPM Section 8.4
  - Applies to commercial units

- Loss of Telemetry emails
  - Resource Owner is responsible to expeditiously investigate and resolve the issue
  - Or request a Telemetry exemption from the ISO for providing the telemetry data

- Deadlines:
  - (5) Business days after notification of the telemetry issue for resources >= 45 MW’s
  - (14) Business days after notification of the telemetry issue for resources < 45 MW’s

- Critical points are listed in Telemetry BPM
Telemetry Exemptions

• (72) consecutive hours of good quality to be considered resolved

• Submit Telemetry Exemption requests to EDAS
  – Must include a detailed resolution plan with concrete deadlines
  – Additional documentation may be required

• Scheduling Coordinator must contact the CAISO Real Time Generation Dispatcher to update the plant output

• Exemptions are not provided before COD
WREGIS (Western Renewable Energy Generation Information System)

WREGIS

an independent, web-based tracking system for renewable energy certificates (REC) that covers the Western Interconnection territory; WREGIS is a division of WECC

Qualified Reporting Entity (QRE)

the role of the QRE is to submit the meter data associated with the renewable energy on behalf of the Generator Owner using the WREGIS application

Qualified Reporting Entity Service Request Application (QRESA)

must be executed for CAISO to perform the QRE services
WREGIS FAQs

Questions

Can the request form be submitted before COD?

Where do I sign in the request form?

Answers

Yes, It is required to be submitted before COD to include test energy.

Once the form is filled out, EDAS will then route it through Docusign.
WREGIS FAQs (Cont.)

Questions

Are there any other documents required to be completed prior to acceptance of the QRE request form?

How long does CAISO acceptance of the application typically take (assuming there are no issues with it)?

Answers

No

Depending on the workload of the EDAS team, it can take a few business days to a couple of weeks.
Metering and Telemetry ensure accurate revenue accounting

Metering and telemetry are mandatory tools for ensuring accurate revenue accounting and ISO operational visibility.

Process and requirements

ISO Tariff - Business Practice Manual for Metering

- Operating procedures - ETIO receiving process
- Meter data represents the energy generated or consumed during a settlement interval. The ISO, ISO-maintained entities, and participants all need to understand the data and how it is maintained. The processes described below are representative of but do not replace, section 10 of the ISO tariffs and Business Practice Manual for Metering.

- ISO's certification of Metering Facilities
- ETIO_s ISO-maintained and non-maintained entities
- ETIO_s Approved Inspection Company
- ETIO_s Meter Data Acquisition and Processing Procedure
- ETIO_s Settlement Quality Meter Data (SQMD) Plan - Submission & Approval Process

More information, required reports, and forms can be found on or through the California ISO's website.
Upcoming changes

• New EDAS Fieldwork phone service
• New EDAS Customer service phone line
• SC Telemetry data validation
Helpful Links

Certification of Metering Facilities

Meter Data Acquisition and Processing Procedure

Appointment Scheduling for EDAS Fieldwork
http://www.caiso.com/fieldworksupport/Pages/default.aspx

Direct Telemetry BPM
https://bpmcm.caiso.com/Pages/BPMDetails.aspx?BPM=Direct%20Telemetry
Helpful Links (Cont.)

EDAS request tool
http://www.caiso.com/fieldworksupport/Pages/default.aspx

Fieldwork Guide

RIG Acceptance Test (RAT) Procedures

RIG/DPG Validation Procedure

Metering Exemptions from Compliance
BPM for Metering
http://bpmcm.caiso.com/Pages/BPMDetails.aspx?BPM=Metering

SQMD Template
http://www.caiso.com/Documents/SQMDPlanTemplate.docx

SQMD Template Tutorial

Operating Procedure 5750 – Submission and Approval Process

EDAS Document Checklists
Wrap Up

Summary, Q&A
Thank you for your participation!

For more detailed information on anything presented, please visit our website at: www.caiso.com or submit a CIDI ticket RE: EDAS.