



California ISO

Settlement User Group

July 19, 2023

10:00 a.m. – 11:00 a.m. (Pacific Time)

Web Conference Information	Conference Call Information
<p>Web Address: https://caiso.webex.com/meet/settlementuser</p> <p>Meeting Number: 961 854 046</p> <p>Audio connection instructions will be available after connecting to the web conference. When prompted, select "Call me" and enter your phone number you will use during the call.</p>	<p>US Toll Free: 1-844-621-3956</p> <p>US Toll : 1- 650-479-3208</p> <p>Access Code: 961 854 046</p>
<p>Calls and webinars are recorded for stakeholder convenience, allowing those who are unable to attend to listen to the recordings after the meetings. The recordings will be publically available on the ISO web page for a limited time following the meeting. The recording, and any related transcriptions, should not be reprinted without the ISO's permission. Hyperlinks in blue in PDF version.</p> <p>The recording will be posted on our website and be available for a short period of time until August 2nd , 2023. Please mute your phone while the discussion is going on in order to eliminate background noise, to unmute press and hold the spacebar to temporarily unmute, double mute. Calls are structured to stimulate an honest dialogue and engage different perspectives.</p> <p>To ask a question after each topic, unmute yourself before asking your question, or enter question on the chat</p> <p style="text-align: center;">please state your name and affiliation. Thank you.</p>	



[mute](#)

Settlement User Group Agenda

Wednesday, July 19, 2023

10:00 a.m. – 11:00 a.m. (Pacific Time)

Time	Topic	Presenter
▪ 10:00 – 10:02	▪ Welcome and Introduction	▪ Massih Ahmadi
▪ 10:02 – 11:00	▪ Settlements <ul style="list-style-type: none">▪ Proposed Revision Requests Update▪ Dispute▪ Training Update	▪ Massih Ahmadi ▪ Manoj George ▪ Cynthia Hinman

PRR and BPM Updates

To view all details for the PRRs in the [BPM Change Management application](#)

PRR	PRR Title	Stage
1491	Ancillary Service State of Charge Constraint	Final
1492	WEIM Resource Sufficiency Evaluation Phase 2	Final
1493	Dispute - Updated BPM Configuration guide for PC CG PC System Resource Deemed Delivered Energy Quantity to accommodate Logical Meter Calculator scenarios where the E-tag is curtailed mid-hour	Final
1494	Dispute - Updated CG PC MSS Deviation Penalty Quantity to accurately account for Resources with SPIN/NSPIN dispatches outside contingency intervals	Final
1495	Dispute - Updated multiple BPM Configuration guides to accommodate MSP allocating one sided charge or payment neutrality adjustments to measured demand in CC 8989 and CC 8999 while also achieving revenue neutrality	Final
1499	Hybrid Phase 2C	Final

Settlements User Group – 07/19/2023

Dispute Topic:

Incorrect Imbalance Energy and Bid Cost Recovery Settlement for Storage/Battery Resources.

Problem Description

CAISO identified an incorrect Settlement for Imbalance Energy and Bid Cost Recovery for Storage resources when they do not receive market awards/dispatches. We identified this issue while researching the disputes submitted by multiple SCs.

We want to thank all the market participants that identified this issue and communicated to us that the RTD Instructed Imbalance energy was getting calculated incorrectly for Storage resources.

Root cause of the Issue

Storage resources submitted energy bids but were not committed by CAISO in Real-Time. In other words, ADS Dispatches were correctly reflected with DOT of 0MW, based on economics.

In some cases these resource submitted an OMS/outage card to derate the Min/Max Status of Charge (SOC) to a different values from what is registered in the Master File.

Incorrect DOP of non-zero is triggered when the Telemetry Status of Charge (SOC) is greater than the Max or lower than Min SOC constraint values based on the Master File (MF) or derated SOC values as reported in OMS. When this happens, real-time market is creating Non-Zero DOP values by assuming that storage resource is charging or discharging.

When the resource has DOT of 0MW with DOP of Non-Zero MW, it leads to incorrect calculation of Expected Energy (EE). This error resulted in incorrect settlements of Imbalance Energy and Bid Cost Recovery.

Impacted Charge Codes

CC6470 and CC64700 - RTD-III Settlement

CC6475 and CC64750 - UIE Settlement

CC6620 and CC66200 - Bid Cost Recovery Settlement.

CAISO's position on this issue

When there is no market awards, dispatches, nor commitments:

- The energy should not be considered as Instructed Imbalance Energy. Total Expected Energy (TEE) should be 0MW.
- CAISO should not pay any Bid Cost Recovery on Energy since there is no CAISO commitment.
- When there is no CAISO dispatch, any Meter deviation from the Total Expected Energy should settle as Uninstructed Imbalance Energy.

Enhancement plan to prevent this issue

For Storage resources, when the Telemetry Min/Max SOC are out of bound, RTD will assume it is at the boundary of SOC range. This solution will resolve by setting the correct initial condition DOP of 0MW.

Example:

When Storage resource has SOC MAX 315 MW and the telemetry SOC is 320 MW, RTD will assume the Telemetry SOC is 315 MW so that no DOP is created. Likewise, when the Storage resource has SOC Min of 75 MW and the telemetry SOC is lower at say 68 MW, RTD will assume the Telemetry SOC is 75 MW.

This enhancement rule is implemented in production as of 6/1/2023.

Correction Plan

For Storage Resources,

- Identify the intervals where we have DOT of 0MW with DOP of Non-Zero MW
- Change the DOP value to 0MW
- Recalculate and Republish the Expected Energy
- Recalculate all the relevant impacted charge codes

We are implementing the above corrections for all the impacted Storage resources starting from Trade Date 11/1/2021.

Timeline for the Corrections

Trade Dates	Settlement Statement
4/7/2023 through 5/31/2023	T+70B
8/22/2022 through 4/06/2023	T+11M
11/01/2021 through 8/21/2022	T+21M

Questions



ISO Training Schedule

Training Course	Date and time
Resource Performance Expectations of Dispatch and Operating Instructions (webinar)	July 25 1:00pm – 2:00pm
ISO Workshop: Introduction to ISO Markets (webinar)	August 8 and 9 9am – 12pm PPT
ISO Workshop: Market Transactions (webinar)	August 15 and 16 9am – 12pm PPT
ISO Workshop: ISO Settlements (webinar)	August 22 and 23 9am – 12pm PPT

Are you looking for more training?

The ISO Learning Center has computer based training available for lots of topics. Check out the Learning Center: <http://www.caiso.com/participate/Pages/LearningCenter/default.aspx>



Next SUG Meeting: August 2nd, 2023 at 10:00 A.M



Settlement User Group Calendar 2023

January						
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RC West Initial and Recalculation Statement and Invoice Published January 3, 2023

- RC West has published the Reliability Coordinator (RC) Services Initial and recalculation statements and invoices for the period provided below to the Market Results Interface-Settlements (MRI-S) and the Secure File Transfer Protocol (SFTP) server on **Jan. 3, 2023**.

Statement	Bill Period
RC Services Initial	1/1/2023 - 12/31/2023
RC Services Recalculation	1/1/2022 - 12/31/2022

- The above RC Services statement and invoice files can be retrieved in MRI-S under the Reliability Coordination tab by selecting RC Services Initial, RC Services Recalc, or RC Services Invoices as the file types and setting the post date to Jan. 3, 2023.
- Statement and invoice file sets are available on MRI-S and SFTP for 45 calendar days after publication. RC Customers are advised to download the files for validation purposes and future reference.
- Payments for the invoices are due no later than 10 a.m. (Pacific Time) on **Feb. 2, 2023**.

RC Services

RC Services

- RC Info Submittal Window – 09/01/2022 – 09/30/2022

- Informational Statement:
 - **Publishes: 10/31/2022**
 - Customer Review Period Resubmittal Window: 11/01/2022 – 11/30/2022

- Statement and Invoice:
 - 2023 Initial & 2022 Recalculation Publishes: 01/03/2023
 - Payment Due: Thursday, 02/02/23

- RC West Payment Calendar:
<http://www.caiso.com/Documents/RCWestAnnualPaymentsCalendar.pdf>

HANA Services

- No updates

Settlement References

- Unscheduled Directed Recalculation Statements and Invoices – presented Jul 20
- NERC/WECC Invoice – presented Sep 14
- Knowledge Articles
- Ways to Participate in Settlements

Unscheduled Directed Recalculation Statements and Invoices

- The California ISO will publish unscheduled directed recalculation settlement statements under run type Daily Rerun Market on July 25, 2022 for the trading days April 1, 2017 thru July 30, 2018. The statements will reflect the outcome of updated wheeling access charge rates under Federal Energy Regulation Commission (FERC) order ER-17-998.
- A calendar reflecting the publication date, review period and invoicing is available on the ISO website at <http://www.caiso.com/market/Pages/Settlements/Default.aspx> under the *Retroactive settlements > Recalculation settlements > Unscheduled directed* subheading.
- The California ISO has posted the following updated wheeling access charge rates effective as noted below on its [settlements webpage](#), under the Transmission access charge rates/Wheeling rates/Wheeling rates 2017 and 2018 subheadings.

Unscheduled Directed Recalculation Statements and Invoices

- These rates will be included in the unscheduled directed recalculation settlement calculation of transmission access charge transactions starting on the following trade dates:

Wheeling Access Rates	FERC Order	FERC Order Date
Rates effective Apr. 21, 2017	DATC Path 15, LCC 2017 TRR information under Docket Number ER17-998	May. 26, 2022
Rates effective Jan. 1, 2018	DATC Path 15, LCC 2017 TRR information under Docket Number ER17-998	May. 26, 2022
Rates effective Ju1. 22, 2018	DATC Path 15, LCC 2017 TRR information under Docket Number ER17-998	May. 26, 2022

- Disputes may be submitted in accordance with section 11.29.8.4.8 of the ISO Tariff. Adjustments for any valid disputes related to incremental data changes will be reflected on a subsequent recalculation settlement statement.
- The market notice can be found in the <http://www.caiso.com/dailybriefing/Pages/default.aspx>

NERC/WECC for AY 2023

- The California ISO published the final North American Electric Reliability Corporation/Western Electricity Coordinating Council (NERC/WECC) charge statements and invoices for assessment year 2023 to the Market Results Interface-Settlements (MRI-S) and the Secure File Transfer Protocol (SFTP) server on Dec. 1, 2022. Statement and invoice files can be retrieved in MRI-S by setting the post date to 12/01/2022. Statement and invoice file sets are available on MRI-S and SFTP for 45 calendar days after publication. Scheduling coordinators (SCs) are advised to download the files for validation purposes and future reference.
- The charges appear on the NERC/WECC final statements and invoices under charge code (CC) 6490, with Jan. 1, 2021 as the trade date.
- Payments for the final NERC/WECC charges are due by 10 a.m. (Pacific Time) on Dec. 22, 2022, pursuant to ISO Tariff section 11.20.5.
- The final NERC/WECC charge rate for assessment year 2023 is provided below for scheduling coordinators' information pursuant to Section 11.20.4 of ISO Tariff.

Item	Value	Unit
Total NERC/WECC Charge for Assessment Year 2023	9,044,037.00	\$
Total NERC/WECC Metered Demand for Calendar Year 2021	216,037,246.08	MWh
Final NERC/WECC Charge Rate for Assessment Year 2023	0.041863323	\$/Mwh

NERC/WECC Preliminary Statements and Invoices for AY 2023 Published

- The California ISO has published preliminary NERC/WECC statements and invoices for 2023 NERC/WECC charges to the Market Results Interface-Settlements (MRI-S) and the Secure File Transfer Protocol (SFTP) server on August 15, 2022. The charges for assessment year 2023 appear on the NERC/WECC Initial statement under charge code (CC) 6490, with January 1, 2021 as the trade date.
- The preliminary NERC/WECC charge rate for assessment year 2023 is provided below for scheduling coordinators' information pursuant to ISO Tariff section 11.20.4.

Item	Value	Unit
Total NERC/WECC Charge for Assessment Year 2023	10,390,938.72	\$
Total NERC/WECC Metered Demand for Calendar Year 2021	216,037,246.08	MWh
Preliminary NERC/WECC Charge Rate for Assessment Year 2023	0.048097904	\$/MWh

- Payments for the preliminary NERC/WECC charges are due by 10:00 a.m. (Pacific Time) on September 14, 2022, pursuant to ISO Tariff section 11.20.5.
- On May 9, 2022, the ISO posted NERC/WECC information files to the MRI-S and the SFTP server in accordance with the approved tariff provisions for review by scheduling coordinators.

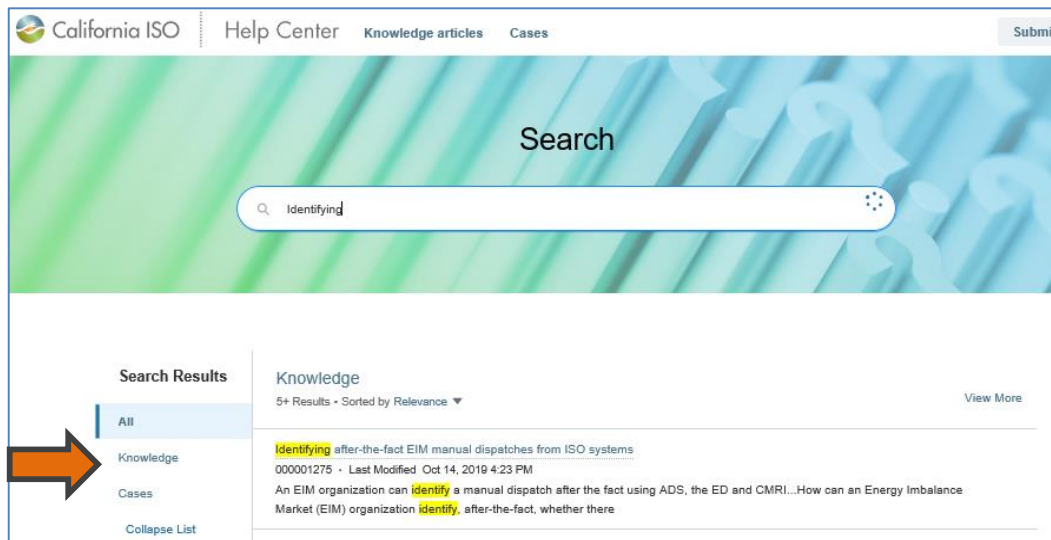
Knowledge Articles

CAISO has posted **Knowledge Articles** for FAQs in CIDI.

To access the articles in CIDI, you either:

Option 1: Type in the keyword “**Identify**” in the search field to pull up the article, or

Option 2: Click on the **Knowledge Articles** tab, and then click the **Settlements and Metering** category link to pull up a list of the Settlements related articles.



California ISO Help Center Knowledge articles Cases Submit a

Search

Identifying

Search Results

All Knowledge Cases Collapse List

Knowledge
5+ Results • Sorted by Relevance View More

Identifying after-the-fact EIM manual dispatches from ISO systems
000001275 • Last Modified Oct 14, 2019 4:23 PM
An EIM organization can identify a manual dispatch after the fact using ADS, the ED and CMRI...How can an Energy Imbalance Market (EIM) organization identify, after-the-fact, whether there

Posted Knowledge Articles to date:

- RC rate location
- RC Informational Statement
- RC services charge
- 2019 prorated RC charge
- Payment calendar
- ED-DPMIN
- After-the-Fact EIM Manual Dispatches from ISO systems
- Validate Mitigated prices in DA, RTPD (FMM) and RTD
- Calculation of meter data for TG resources
- Pricing node (Pnode) price used for CRR Settlement
- In relation to the Day-Ahead Nodal Pricing Model, the California ISO has posted a Market Analysis report to its website for market participant review. [Nodal Pricing Model Report v1](#)

Ways to participate in settlements

- Visit the Settlements page
 - <http://www.caiso.com/market/Pages/Settlements/Default.aspx>
- Attend web conference meetings
 - Settlement User Group (SUG) bi-weekly meetings
 - Release User Group
 - Market Sim Conference Calls
 - Initiative status with settlement updates
 - <http://www.caiso.com/StakeholderProcesses/>
 - [System change with settlement updates on independent releases](#)
- BPM Change Management monthly web meeting
 - Settlement and Billing BPM status updates
 - <http://bpmcm.caiso.com/Pages/default.aspx>
 - <http://www.caiso.com/rules/Pages/BusinessPracticeManuals/Default.aspx>
 - <http://www.caiso.com/Documents/ISO-AcronymList.pdf>

Settlement User Group

Thank you for participating in our call

This is the last slide to this presentation