

Settlement User Group

Dec 8, 2021

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

Web Conference Information	Conference Call Information
Web Address: https://caiso.webex.com/meet/settlementuser	US Toll Free: 1-844-517-1271
Meeting Number: 961 854 046	00 1011 100. 1 044 017 1271
Audio connection instructions will be available after connecting to the web conference. When prompted, select "Call me" and	US Toll : 1- 682-268-6591
enter your phone number you will use during the call.	Access Code: 961 854 046

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.

The recording will be posted on our website and be available for a short period of time until Dec 20, 2021. Please 0 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.

To ask a question after each topic, unmute yourself before asking your question, or enter question on the O Chat please state your name and affiliation. Thank you.



Settlement User Group Agenda

Wednesday, Dec 8, 2021

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

Time	Topic	Presenter
1 0:00 – 10:02	 Welcome and Introduction 	■ Tyler DuBeshter
1 0:02 – 11:00	■ Settlements	
	 NERC/WECC for Assessment Year 2022 	Kathryn Wills
	 Unscheduled Directed Recalculation Statements and Invoices 	Karen Voong
	■ February 2022 Emergency Release	Elizabeth Caldwell
	■ February 2022 Release Projects	Trang Vo
	 Secure File Transfer Protocol (SFTP) 	Justin Wong
	 Proposed Revision Requests Update 	Tyler DuBeshter





RC Services

RC Services

Informational Statement:

- Customers external to CAISO BAA submit 2020 NEL/NG data in MRI-S between 09/01/21 and 09/30/21
- Informational Statement will publish 11/01/21
- Customer review and re-submit 2020 data (if needed) by 11/30/21

Statement and Invoice:

- Both publish on Monday, 01/03/22
- Payment Due by Wednesday, 02/02/22

RC West Payment Calendar:

http://www.caiso.com/Documents/RCWestAnnualPaymentsCalendar.pdf

HANA Services

No updates



NERC/WECC for Assessment Year (AY) 2022

- The ISO published final NERC/WECC statements and invoices for 2022 NERC/WECC charges to the Market Results Interface-Settlements (MRI-S) and the Secure File Transfer Protocol (SFTP) server on December 1, 2021. The charges for assessment year 2022 appear on the NERC/WECC recalculation statement under charge code (CC 6490), with January 1, 2020 as the trade date.
- Payments for the final NERC/WECC charges are due by 10:00 am (Pacific Time) on Wednesday December 22, 2021, pursuant to ISO Tariff section 11.20.5.
- The final NERC/WECC charge rate for assessment year 2022 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 2022	10,426,221.00	\$
Total NERC/WECC Metered Demand for Calendar Year 2020	216,770,798.80	MWh
Final NERC/WECC Charge Rate for Assessment Year 2022	0.048097904	\$/MWh

 On June 7, 2021 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.



Unscheduled Directed Recalculation Statements and Invoices

- On Dec. 9, 2021, the California ISO will publish unscheduled directed recalculation settlement statements reflecting the resolution of a dispute with a market participant. On the same day, the ISO will issue separate invoices for these amounts with a payment due date of December 15.
- A calendar reflecting the revised 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 settlement files will be available under run type Daily Rerun Market trading dates Oct. 10, 2012, and Feb. 16, 2018. The details for October 10, 2012 will be in the comment field of the bill determinant file. Customer Service will provide the details for February 16, 2018, to affected market participants. Any disputes of charges appearing on the unscheduled directed recalculation settlement statements must be submitted by Wednesday, January 12, 2022.



February 2022 Emergency Settlement Release

- Release scope:
 - COTP/WAPA contract change for loss settlement = impacts participants scheduling on COTP intertie + WAPA
 - Day Ahead Nodal Pricing Model P2 = impacts PacifiCorp EIM
 - Joint Owned Units (JOU) Pilot = impacts Tucson EIM + Public New Mexico EIM
- 1st draft tech docs posted: 11/8
- 1st draft config output file + release component summary posted: 11/22
- 2nd draft config output file + updated release component summary to post: 12/27
- Market sim window targeting: 1/4/22 1/14/22, subject to change
 - Mkt Sim kick off call targeting: 1/3/22
- Pre-prod configuration output file + release artifacts targeting: 2/7
- Anticipated prod deployment: 2/16



February 2022 Release

	Impact	(Ext) BRS	Config Guide	Tech Spec	Mkt Sim Scenarios	Tariff	врм	Training	Market Sim	Production Deployment	Production Activation
February 2022 Release			11/08/21				11/23/21		01/04/22 - 01/14/22	02/16/21 (Settlements)	
COTP WAPA Settlements (Loss Settlement Contract Change)	Entities scheduling on COTP intertie	• 10/29/21 • 11/3/21 (v1.1)	11/08/21	N/A	N/A	N/A	11/23/21	Knowledge Article	1/4/22 – 1/14/22	2/16/22	4/1/21
Day Ahead Nodal Pricing Model Phase 2	Only PacifiCorp EIM	N/A	11/08/21	N/A	N/A	Accepted 2/28/20	N/A	N/A	1/4/22 – 1/14/22	2/16/22	2/16/22
Joint Owned Units Pilot	Only Tucson EIM and Public Service Company of New Mexico EIM	N/A	11/08/21	N/A	N/A	Filed 10/22/21	N/A	N/A	1/4/22 – 1/14/22	2/16/22	4/1/22



COTP WAPA Settlements

Project Information	Details/Date
High Level Business Problem or Need	The ISO has scheduling rights on the California-Oregon Transmission Project (COTP) for market transactions due to Existing Contract rights that have been turned over to the ISO by PG&E and TANC. As such, starting April 1, 2021, WAPA, PG&E and TANC amended the Existing Contract from payment in-kind of energy to bill the ISO for financial payment for COTP loss settlements related to PG&E's 33 MW and the monthly rights TANC turns over to the ISO that allow market participants to schedule on the COTP.
High Level Project Scope	The purpose of this project is to develop a mechanism to settle WAPA Contract 05-SNR-00869.
BPM Changes	Settlements & Billing
Tariff Change	N/A
Impacted Systems	Settlements
Customer Impacts	Entities scheduling on the COTP intertie; ISO will contact these market participants

System	High Level Changes
Settlements	System must have updated configuration modifications for one charge code and one pre-calculation.
	System must have the capability to calculate the payback loss amount for entities scheduling on the COTP line.
	System must have the capability to calculate the COTP loss price.
	System shall define new bill determinants for the COTP loss payback calculation.
	System shall identify the SCID that will receive the loss payback and receive the loss payback percentage based on Internal System data.



Day Ahead Nodal Pricing Model Phase 2

- PacifiCorp has contracted with the California Independent System
 Operator (CAISO) to provide a Nodal Pricing Model (NPM) dayahead service that economically clears energy supply and demand
 bids for the PacifiCorp one day ahead. PacifiCorp intends to use the
 nodal prices produced by the model to calculate the Net Power Cost
 (NPC) for each state under its service territory.
- This is the 2nd phase of this effort, which will be implemented consistent with the Nodal Pricing Model Agreement accepted by FERC (See FERC Docket No. ER20-664).



Joint Owned Units Pilot

- The purpose of this project is to implement a pilot for Joint
 Ownership Units (JOU) in the model. This JOU pilot will be limited to
 a single implementation with the Public Service Company of New
 Mexico and the Tucson Electric Company. This implementation will
 require FERC acceptance of a pilot agreement(s) among the parties
 that sets forth the parameters of the pilot. Based on the results of
 this pilot, the CAISO intends to pursue a stakeholder initiative that
 would establish rules for other market participants to implement JOU
 functionality.
- The JOU Pilot is an opportunity to learn and provide feedback into a stakeholder process. There will be a follow on stakeholder process to establish policy for JOU.
- FERC filing: http://www.caiso.com/Documents/Oct22-2021-
 JointOwnedUnitJOUAgrmt-CaliforniaISO-NewMexico-Tucson-ER22-190.pdf



Settlements SFTP Change

- Settlements SFTP will be moving to new servers and to a later software version
- This version of software offers the latest security features
 - Data files will not be impacted
 - Connection will be terminated/reset
- SFTP documentation updated on CAISO's developer.com site
- Updated IP address in connecting and retrieving SFTP files; website remains the same



Settlements SFTP Change

- Cutover Details
 - Cutover duration ~1-2 minutes
 - Users will be disconnected and need to reconnect
 - While reconnecting, users may receive a prompt to accept a new certificate and should click 'Yes'
- MAP-Stage: 11/12/2021 (Complete)
 - Issues encountered after transition
 - Some users were blocked due to an issue white listing IP addresses
 - Delay in processing new Certificates due the upgrade
- Production scheduled: 12/10/2021 (12:00 1:00pm)
 - Customer notice will be published



PRR and BPM Updates

To view all details for the PRRs in the BPM Change Management application

PRR	Title	ВРМ	Status
1394	Updated BPM Configuration guide for CC 4575 to clarify business rule 4.1 exclusions and variable name.	CG CC 4575 GMC Scheduling Coordinator ID Charge v5.0e	Initial comment period will closed on 12/7, will be discussed in December/January BPM meeting
1397 - NEW	Updates to BPM for tariff amendment adjusting the meaning of business day (FERC Filing ER21-2854-000)	Section 2.3 Settlements & Invoicing Cycles	Initial comment period will closed on 12/14/2021, will be discussed in December/January BPM meeting
1398 - NEW	Update BPM configuration guides to support the day ahead nodal pricing model phase 2 ancillary services Initiative	Pre-Calculation Ancillary Services v 5.11 GMC Bid Transaction Fee 4515 v 5.7	Initial comment period will closed on 12/14/2021, will be discussed in December/January BPM meeting
1399 - NEW	Updated multiple BPM configuration guides to accommodate settling WAPA/TANC Contract 05-SNR-00869	CG CC 6976 Trans Loss Oblig Chrg for RT Schs Under Control Agmt_5.2 CG CC CG CC 6977 Allocation of Transmission Loss Obligation Charge_5.1a CG PC Allocation of Transmission Losses Under Control Agreements_5.3	Initial comment period will closed on 12/14/2021, will be discussed in December/January BPM meeting



ISO <u>Instructor-Led</u> Training Sessions

Visit the caiso.com **Learning Center** web page to access our training calendar, register for courses and find other informational resources: http://www.caiso.com/participate/Pages/LearningCenter/default.aspx

Stay tuned! The 2022 training schedule will be available on the ISO website in the coming weeks.

All Summer Readiness related webinar recordings are available on <u>www.caiso.com</u> in the Learning Center and on the Summer Readiness release page.





ISO <u>Computer Based</u> Training Programs

Visit caiso.com **Learning Center** web page to access our training calendar, register for courses and find other informational resources: http://www.caiso.com/participate/Pages/LearningCenter/default.aspx

Computer Based Training – Settlements						
There are more than 40 CBT modules on the ISO website covering:						
RC Settlements	http://www.caiso.com/CBT/RC-Settlements/rc-settlements.html#/					
Settlement Validation Practice	http://www.caiso.com/CBT/Settlements%20Validation%20Practice/story_html5.html					
Commitment Costs	http://www.caiso.com/CBT/CommitmentCosts-CBT/story.html					
Settlements foundational concepts (EIM)	https://www.westerneim.com/CBT/Settlements%20Foundational%20Concepts/Settlements- FoundationalConcepts.html					
Metering Overview	http://www.caiso.com/CBT/MeteringOverview/MeteringOverview.html					
Settlements Process	http://www.caiso.com/CBT/SettlementsProcess/story_html5.html					
Market Pricing	http://www.caiso.com/CBT/Market-Pricing/story.html					
Day-Ahead Settlements	http://www.caiso.com/CBT/Day-Ahead-Settlements/Day-Ahead-Settlements.html					
Real-Time Settlements	http://www.caiso.com/CBT/Real-TimeSettlements/Real-TimeSettlements.html					
Post-Market Settlements	https://www.caiso.com/CBT/Post-Market-Settlements/Post-Market-Settlements.html					
Convergence Bidding Settlements 🗡	https://www.caiso.com/CBT/ConvergenceBiddingSettlements/ConvergenceBiddingSettlements.html					
Also new initiatives training present	Also new initiatives training presentations and videos can be found on the Learning Center web page!					





Settlement Corner

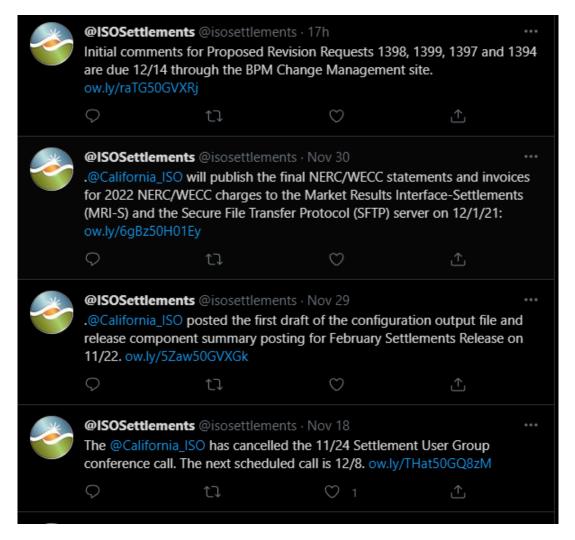
Upcoming Topics	Previous Topics	Published Knowledge Articles
 February 2022 Release Spring 2022 Release 	 Renewable and energy storage - Link Fall Release Projects - Link Transportation electrification and micro grids Link Real Time Settlement P2 Link ESDER P2 Link UFE election process for RT Settlement P2 Link Real Time Settlement Initiative - UFE Settlement - presented Oct 13 Link 	 RC Informational Statement 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 Energy Transfer System Resource (ETSR) Pricing node (Pnode) price used for CRR Settlement



topics to us at twitter.com/isosettlements.com



Recent Tweets







Settlement User Group Calendar 2022

January							
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	December						
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Meeting

Agenda posted



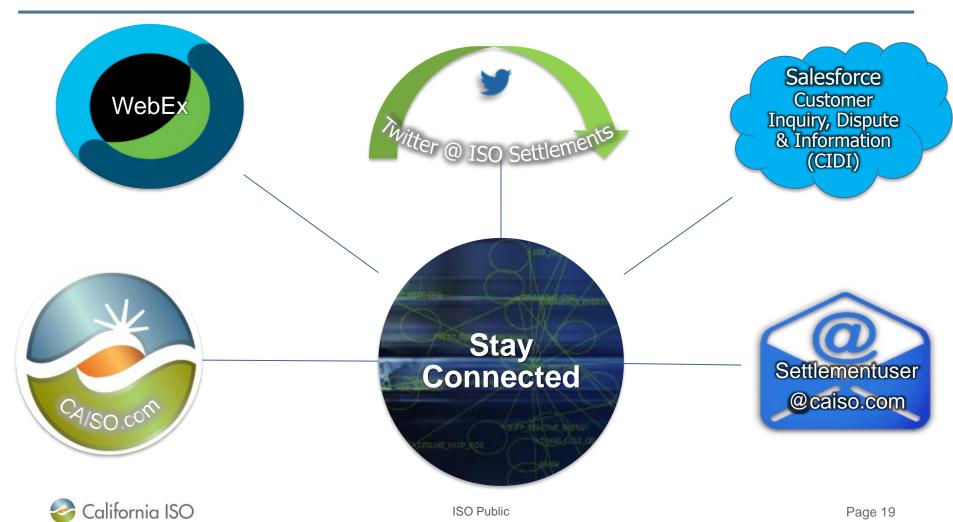
Holiday



Follow us on Twitter @ISOSettlements for our latest updates

Next SUG Meeting: Dec 22, 2021

at 10:00 A.M



Settlement References

- NERC/WECC Invoice presented Sep 1
- Adjustment of Amendment 60 Interest and GFN Distribution
 — presented Sep 1
- Knowledge Articles
- ISO Settlements Twitter Page
- Ways to Participate in Settlements
- Settlement User Group Calendar 2022



NERC/WECC Invoice

- The ISO published preliminary NERC/WECC statements and invoices for 2022 NERC/WECC charges to the Market Results Interface-Settlements (MRI-S) and the Secure File Transfer Protocol (SFTP) server on August 20, 2021. The charges for assessment year 2022 appear on the NERC/WECC initial statement under charge code (CC) 6490, with January 1, 2020 as the trade date.
- The preliminary NERC/WECC charge rate for assessment year 2022 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 2022	10,170,748.45	\$
Total NERC/WECC Metered Demand for Calendar Year 2020	216,770,798.8	MWh
Preliminary NERC/WECC Charge Rate for Assessment Year 2022	0.046919366	\$/MWh



Adjustment of Amendment 60 Interest and GFN Distribution

- On April 30, 2021, the ISO previously published settlements statements and invoices that reflected interest through April 30, 2021 for Amendment 60.
- As noted on a call held on July 21, 2021 (see link below for presentation discussed on the July 21 call) additional settlement adjustment are required for:
 - Correcting errors in the interest calculations for March 2005 for startup costs and October 2007 for minimum load cost
 - Unwind incorrect distribution of California Oregon Transmission Project Agreement funds
 - Reallocation of payments and charges for use of COTP Transmission (July December 2004)
 - Distribution of funds from a separate GFN (reflected on the daily historical initial statement for trade date, March 02, 2009)
 - As discussed on the July 21, 2021 call, the ISO will be calculated incremental interest on the April 30, 2021 and September 17, 2021 invoices



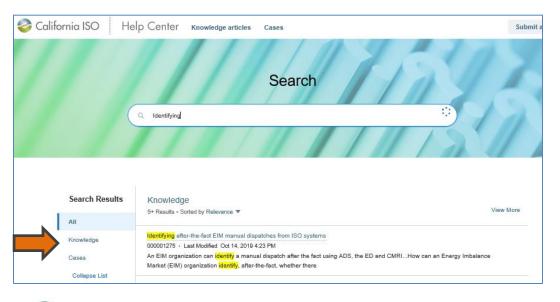
Knowledge Articles

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.



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

California ISO

ISO Settlements Twitter

- Settlement related updates
- Market sim updates
- Note: Will not replace any existing media communications
- Please take the opportunity to follow <u>@ISOSettlements on Twitter</u> by downloading the Twitter application to any mobile device
- Twitter feed can be accessed on any web browser
- No account required to view the Twitter feed and posts
- Save twitter page as a 'Favorite' on your tab







Ways to participate in settlements

- ISO Settlements Twitter Page
 - https://twitter.com/isosettlements
- 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



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