

Settlement User Group

July 7, 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	03 1011 FIEE. 1-044-317-1271
Audio connection instructions will be available after connecting	US Toll : 1- 682-268-6591
to the web conference. When prompted, select "Call me" and 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 July 21, 2021. Please 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

please state your name and affiliation. Thank you.

Settlement User Group Agenda

Wednesday, July 7, 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	
	 Summer/Q2 2021 Settlement Release 	Elizabeth Caldwell
	■ Fall/Q3 2021 Settlement Release	Elizabeth Caldwell
	Market Simulation 2021 Updates	Anshuman Vaidya, Trang Vo
	 Market Simulation Settlement Calendar 	Assad Al-Baijat
	Customer Readiness 2021 Training	Radha Madrigal





Summer/Q2 2021 Settlement Release

- Release scope: Summer 2021 Readiness: Make Whole/Uplift Settlement for Economic Bid Hourly Block Resources with FMM Inc Import or FMM Dec Export.
- 1st draft tech docs posted: 4/7
- 1st draft config output file + release component summary + updated tech docs: 4/21
- 2nd draft config output file posted: 5/11
- Market sim in progress: 4/26 7/6
 - Conference calls are bi-weekly, Monday + Thursday
 - Stay current thru <u>Release User Group</u> (RUG), every other Tuesday 10-11am
 - Next RUG on 6/29
- 3rd draft config output file + updated release component summary posted: 6/22
 - Additional configuration change to CC 6483 to resolve design gap
 - Threshold value applied to CC 6456
 - Executed + published rerun statement for TD 6/4 to demo changes
- Pre-prod configuration output file + release artifacts posted: revised date 6/25
- Prod deployment: 6/30
 - Configuration effective date: retro, 6/1 to meet system processing requirements
 - Upstream data flow expected: 6/15, uplift would only calc on or after this date
 - Some TD processing may miss T+9 if uplift occurs, will reflect on T+70B



ISO Public

Fall/Q3 2021 Settlement Release

- Release scope:
 - Projects with Settlement Configuration Changes:
 - ESDER Phase 4
 - Real Time Settlement Review Phase 2
 - Intertie Shadow Pricing Resolution
 - Non-project: outlined in release component summary
- 1st draft tech docs posted: 5/28
- 1st draft config output file + release component summary posted: 6/14
- 2nd draft config output file + updated release component summary to post: 7/21
- 3rd draft config output file + updated release component summary to post: **8/25**
- Market sim targeting: revised dates 8/30 10/1
- Pre-prod configuration output file + release artifacts to post: 10/20
- Anticipated prod deployment: 10/27



Fall/Q3 2021 - Settlement Release - PRRs Forthcoming

Project	Charge Codes
Intertie shadow pricing resolution Effective Date: 11/1/2021	6710 Day Ahead Congestion - AS Spinning Reserve Import Settlement v5.4 6715 Real Time Congestion - AS Spinning Reserve Import Settlement v5.3 6720 Day Ahead Congestion - AS Non-Spinning Reserve Import Settlement v5.4 6725 Real Time Congestion - AS Non-Spinning Reserve Import Settlement v5.3 6750 Day Ahead Congestion - AS Regulation Up Import Settlement v5.3 6755 Real Time Congestion - AS Regulation Up Import Settlement v5.3 6760 Day Ahead Congestion - AS Regulation Down Import Settlement v5.4 6765 Real Time Congestion - AS Regulation Down Import Settlement v5.3
Real-time settlement review phase 2 Effective date: 11/1/2021	64740 Real-Time Unaccounted for EIM Energy Settlement v5.3 6985 Real Time Marginal Losses Offset v5.7 Real Time Congestion v5.7
Energy storage and distribution energy resources phase 4 Effective date: 11/1/2021	RTM Net Amount v5.36
Short long start definition initiative Effective date: 11/1/2021	RA Availability Incentive Mechanism 5.10.0a CG PC Start-Up and Minimum Load Cost v5.18





Market Simulation Summer 2021 Updates

Summer 2021 Release Initiatives	Start Date	Start Date (Trade Date)	End Structured Simulation Start (Trade Date)		Go Live Date
Summer 2021 Release Market Simulation	04/26/21	04/26/21	07/06/21	05/10/21	
Resource adequacy enhancements track 1 • Phase 2 – Scenario 3,4,5 • OMS Prevention of Extension; Overlapping Outages; Prevention of Curtailment Increase; Ambient Outages		 Phase 2 – 6/16 OMS Changes - 7/1 		 Phase 2 – 6/17 OMS Changes - 7/1 	Phase 2- June 30 OMS Changes - July 15
Summer 2021 readiness Phase 3 – Scenario 3,4		Phase 3 – 6/14		Phase 3 - 6/17	Phase 3- June 30
Summer 2021 readiness Export, wheeling, and load scheduling priorities		6/30	-	7/7	By July 15

<u>Presentation - Market Simulation Summer 2021 Release - Jun 21, 2021</u> <u>Market Simulation Plan - Summer 2021 Release</u>





Market Simulation Initiatives – Summer 2021 Updates

Resource adequacy enhancements track 1

- Structured: Phase 2: June 17
 - Structured Scenarios document http://www.caiso.com/Documents/MarketSimulationResourceAdequacyEnhancementTrack1.pdf

Summer 2021 readiness

- Structured: Phase 3: June 17
 - Structured Scenarios document http://www.caiso.com/Documents/MarketSimulationStructuredScenariosSummerReadiness2021.pdf



Market Simulation Calendar

California ISO

Summer 2021 Release Calendar (MAP STAGE)

Apr 26, 2021 through Jul 6, 2021

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Calendar	Day	CMRI	Submit Meter Data	Publish Initial Statement	Submit Meter Data	Publish Recalc Statement	Publish Market Invoice
Day		T+1B	by T+2B 10:00 AM for Initial	T+5B	by T+5B 18:00 for Recalc	T+8B	
				T+9B		T+70B	
28-Jun-21	Monday	25-Jun	24-Jun	1+30		14705	
29-Jun-21	Tuesday	25-Jun					
25-Jun-21	Tuesday		25-Jun	22-Jun	22-Jun	17-Jun Monthly Recalc 15-Jun -17-Jun	Daily Recalc 15-Jun; 17-Jun Monthly Recalc 15-Jun -17-Jun
30-Jun-21	Wednesday			23-Jun	23-Jun		
01-Jul-21	Thursday			24-Jun	24-Jun		
02-Jul-21	Friday	1-Jul		25-Jun; Monthly Initial 22-Jun -25-Jun	25-Jun	22-Jun	Daily Initial 22-Jun; 23-Jun; 24-Jun; 25-Jun Monthly Initial 22-Jun -25-Jun
03-Jul-21	Saturday						
04-Jul-21	Sunday						
05-Jul-21	Monday				CASIO Holiday		
06-Jul-21	Tuesday		1-Jul			23-Jun	
07-Jul-21	Wednesday	6-Jul				24-Jun	
08-Jul-21	Thursday		6-Jul			25-Jun; Monthly Recalc 22-Jun -25-Jun	Daily Recalc 22-Jun; 23-Jun; 24-Jun; 25-Jun Monthly Recalc 22-Jun -25-Jun
09-Jul-21	Friday			1-Jul	1-Jul		
10-Jul-21	Saturday						
11-Jul-21	Sunday						
12-Jul-21	Monday						
13-Jul-21	Tuesday			6-Jul	6-Jul		
14-Jul-21	Wednesday			Monthly Initial 1-Jul -6-Jul		1-Jul	Daily Initial 1-Jul; 6-Jul Monthly Initial 1-Jul -6-Jul
15-Jul-21	Thursday						
16-Jul-21	Friday					6-Jul	
17-Jul-21	Saturday						
18-Jul-21	Sunday						
19-Jul-21	Monday					Monthly Recalc 1-Jul -6-Jul	Daily Recalc 1-Jul; 6-Jul Monthly Recalc 1-Jul -6-Jul



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

Training Courses and workshops	Date and time
Welcome to the ISO Webinar	August 11, 2021 (9am - 11am)
Energy Storage and Distributed Energy Resources - Phase 4 (Tentative)	August 31, 2021 (9:30am-11:00am)
Short-Long Start Definitions Training (Tentative)	September 7, 2021 (1pm-2:30pm)
Hybrid Resources – Phase 2a (Tentative)	September 9, 2021 (10am-11:30am)
Real-time Settlements Review — Phase 2 (Tentative)	September 9, 2021 (1pm - 2pm)
Variable Operations and Maintenance Cost Review (Tentative)	October 14, 2021 (11am – noon)

All Summer Readiness related webinar recordings are available on www.caiso.com 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 30 computer based training modules on the ISO website covering:

New initiatives training course on the learning center web page and retooling Settlements trainings

RC Settlements	http://www.caiso.com/CBT/RC-Settlements/rc-settlements.html#/
Energy Settlements Validation Practice	http://www.caiso.com/CBT/EnergySettlementsValidation/story.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
Full Network Model	http://www.caiso.com/CBT/FullNetworkModel/FullNetworkModel.html





Settlement Corner

Upcoming Topics	Previous Topics	Published Knowledge Articles
Fall 2021 Settlement Release Projects	 Storage- <u>Link</u> Bid Cost Recovery - <u>Link</u> FERC 841- requested adjustments - <u>Link</u> Renewable and energy storage - <u>Link</u> Fall Release Projects - <u>Link</u> Transportation electrification and micro grids <u>Link</u> Real Time Settlement P2 <u>Link</u> 	 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 2021

Market Services

Settlement User Group Meetings

Note: dates subject to change; for the latest information please visit the Calendar on www.caiso.com and follow us on Twitter @ISOSettlements

January						
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California ISO

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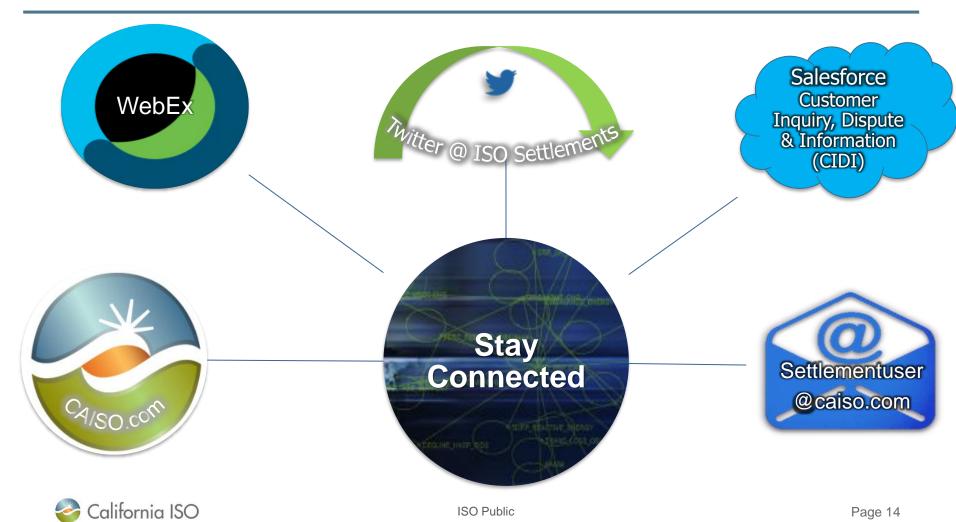
Meeting

Agenda posted

Holiday

Next SUG Meeting: July 21, 2021

at 10:00 A.M



Settlement References

- Settlement User Group Calendar 2021
- Knowledge Articles
- ISO Settlements Twitter Page
- Ways to Participate in Settlements



Settlement User Group Calendar 2021

Market Services

Settlement User Group Meetings

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California ISO

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Meeting

Agenda posted

Holiday

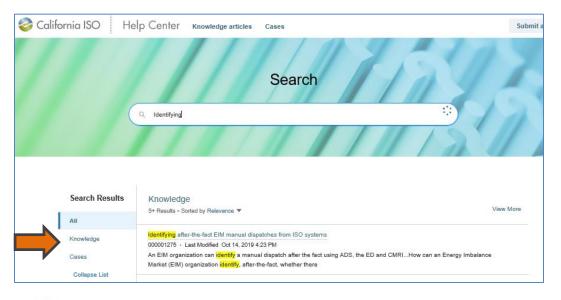
Knowledge Articles

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:

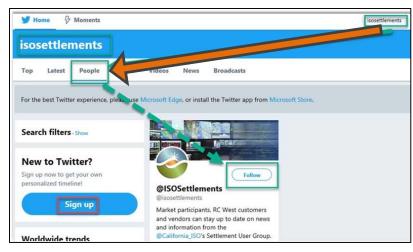
- RC rate location
- RC Informational Statement
- RC services charge
- 2019 prorated RC charge
- Payment calendar
- ED-DPMIN
- After-the-Fact EIM Manual Dispatches from ISO systems
- Validate Mitigated prices in DA, RTPD (FMM) and RTD
- Calculation of meter data for TG resources
- Pricing node (Pnode) 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



Follow us on Twitter @ISO Settlements

