



California ISO

Settlement User Group

July 8, 2020

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 the phone number you will use during the call. You will be called by the conference shortly.</p>	<p>Dial-in Number: (866) 528-2256</p> <p>International Dial-in: (216) 706-7052</p> <p>Access Code: 673 78 64</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.</p> <p>The recording will be posted on our website and be available for a short period of time until July 22, 2020.</p> <p>Please mute your phone and do not put it on hold while the discussion is going on in order to eliminate background noise. There will be an opportunity to ask questions after each topic, but before asking your question, please state your name and affiliation. Thank you.</p>	



ISO Public



Settlement User Group Agenda

Wednesday, July 8, 2020

10:00 a.m. – 11:00 a.m. Pacific Time

Time	Topic	Presenter
▪ 10:00 – 10:05	▪ Welcome and Introduction	▪ Tyler DuBeshter
▪ 10:05 – 11:00	▪ Settlements <ul style="list-style-type: none">– CRR 1b Post Implementation update– Fall 2020 – Settlement Release Milestones and Scope– Q4 2020 - Settlement Release Scope– Fall Release Market Simulation Settlements Calendar	▪ Jeremy Malekos ▪ Elizabeth Caldwell
	▪ Settlement Corner: Topics	▪ Assad Al-Baijat
	▪ Customer Readiness Spotlight on: Energy Settlement Validation Practices	▪ Cindy Hinman

CRR 1b Post Implementation update

Summary of change:

- **Issue:** CRR options are not receiving adequate payment for their CRR. This issues is due to the netting of notional values across time intervals when the option is in the counter flow vs. flow direction. The CRR option should receive a payment in the flow direction and not receive a payment when the sink exceeds the source.
- **Solution:** This enhancement will run prior to the CRR1B calculation process. The source and sink MCCs shall be compared for each option CRR and each hour. If the value of sink MCC -source MCC is positive, then the CRR shall be included in the CRR1B calculations for that hour. If the value is zero or negative, then the CRR shall not be included. This shall be an hour by hour comparison. A possible outcome is that an option CRR is considered in CRR1B for some hours but not all hours.

–This change will be effective **1/1/2019**, **Production deployment 7/9/2020**

Fall 2020 - Settlement Release Milestones

Initial Release Milestones as follows:

- 1st draft technical documentation posted = **5/29**
- 1st draft configuration output file + initial release component summary posted = **6/15**
 - All fall projects except FERC 841
- 2nd draft technical documentation updates posted = **6/26**
 - To include FERC 841 + MSTT
- 2nd draft configuration output file + updated release component summary ETA = **7/24**
- Fall release market sim
 - connectivity start scheduled for 7/27
 - please stay informed by participating in [Release User Group](#) (RUG)
- Pre-production draft configuration output file + release artifacts planned = 9/22
- Production deployment planned = 9/29



Fall 2020 - Settlement Release Scope

Project	Charge Codes/Impacts
<p>Excess behind the meter production (EBTMP)</p> <p>Effective date: 1/1/2021</p>	<p>6046 6474 6788 Ancillary Services PC Measured Demand Over Control Area Excluding MSS Energy PC Measured Demand Over Control Area PC MSS Deviation Penalty Quantity PC MSS Netting PC Real Time Energy Quantity PC ETC TOR CVR Quantity PC</p>
<p>Intertie deviation settlement – implementation (IDS)</p> <p>Effective date: 10/1/2020</p>	<p>6455 (Terminated) 6457 (Terminated) 6456 (New) 6458 (New) System Resource Deemed Delivered Energy Quantity PC</p>

Fall 2020 - Settlement Release Scope (cont.)

Project	Charge Codes/Impacts
<p>Energy storage and distributed energy resources (ESDER 3B) Effective date: 10/1/2020</p>	<p>Spin Non Spin No Pay Quantity PC RUC No Pay Quantity PC RTM Net Amount PC</p>
<p>Market settlement timeline transformation (MSTT) Effective date: 1/1/2021</p>	<p>6474* 64740* Real Time Energy Quantity PC* *These are design only. Configuration Guide change not expected for these charge codes but will be reflected have daily initial runs that include UFE (CC 6474, 64740), MSS Deviation Penalties (CC 1407, 2407), EIM Transfers and EIM Bid Cost recovery uplift allocation.</p>
<p>ADS Replacement</p>	<p><i>No Settlement configuration impact; MRI-S only:</i> ADS data will only be available for 30 days, Market participants will need to download and store this data beginning 10/1/2020.</p>



Fall 2020 - Settlement Release Scope (cont.)

Project	Charge Codes/Impacts
<p>FERC Order No. 841 – requested adjustment</p> <p>Effective date: 10/1/2020</p>	<p>6011 6460 6470 6474 6475 6482 6488 6824 7070 7071 7077 7081 7087 64600 64700 64740 64750 IFM Net Amount PC RTM Net Amount PC Real Time Energy Quantity PC RUC Net Amount PC</p>



Fall 2020 - Settlement Release Scope (cont.)

Project	Charge Codes/Impacts
Commitment Cost Enhancement Tariff Clarifications Effective Date: 7/1/2020	RAAIM PC



Q4 2020 - Settlement Release Scope

Project	Charge Codes/Impacts
<p>Day Ahead Nodal Model Pricing Project</p> <p>Effective Date: 1/1/2021</p>	<p>6011 6790 6947 6630 6636 6637 4515 4560</p> <p>Nodal Pricing Model PC</p>
<p>Asymmetrical Wheeling</p> <p>Effective Date: 1/1/2021</p>	<p>RT Energy Quantity PC Real Time Congestion PC</p>

Note does not include all projects- settlements only

Draft Fall Release Market Simulation Settlements Calendar

- Connectivity is scheduled to run from 7/27 to 8/7
- Structured scenarios will run 8/10 – 8/21
- Unstructured from 8/24 to 9/4

Calendar Day	Day	CMRI T+1B		Publish Initial Statement T+4B	Meter Data Due T+4B Statement	Publish Initial statement T+6B	Publish Recalc Statement T+8B	Meter data due for T+70B statement	Publish Recalc Statement T+9B	Publish Market Invoice
			Submit Meter Data by T+3B 18:00 for T+9B Initial	T+3B Initial. Estimated by DReAMS. No Meter Data submission	Submit Meter Data by T+4B 18:00 for Recalc	T+9B Initial. Includes Estimation		Submit Meter Data by T+6B 18:00 for Recalc	T+70B Recalculation	
				INITIAL (Current MSTT)	Current MSTT	INITIAL (New MSTT)	RECALC1 (Current MSTT)	New MSTT	RECALC (New MSTT)	
27-Jul-20	Monday									
28-Jul-20	Tuesday									
29-Jul-20	Wednesday	28-Jul								
30-Jul-20	Thursday	29-Jul								
31-Jul-20	Friday									
01-Aug-20	Saturday									
02-Aug-20	Sunday									
03-Aug-20	Monday			28-Jul	28-Jul					
04-Aug-20	Tuesday			29-Jul	29-Jul					
05-Aug-20	Wednesday			Monthly Initial 28-Jul - 29-Jul						Daily Initial 28-Jul, 29-Jul Monthly Initial 28-Jul - 29-Jul
06-Aug-20	Thursday	4-Aug								
07-Aug-20	Friday	5-Aug					28-Jul			
08-Aug-20	Saturday									
09-Aug-20	Sunday									
10-Aug-20	Monday			4-Aug	4-Aug		29-Jul			
11-Aug-20	Tuesday			5-Aug	5-Aug		Monthly Recalc 28-Jul - 29-Jul			
12-Aug-20	Wednesday			Monthly Initial 4-Aug - 5-Aug						Daily Recalc 28-Jul, 29-Jul Monthly Recalc 28-Jul - 29-Jul Daily Initial 4-Aug, 5-Aug Monthly Initial 4-Aug - 5-Aug
13-Aug-20	Thursday	11-Aug								
14-Aug-20	Friday	12-Aug					4-Aug			

Draft Fall Release Market Simulation Settlements Calendar (cont.)

- MSTT Structured scenarios
- will run 8/25, 8/26, 9/1, 9/2

Calendar Day	Day	CMRI T+1B	Submit Meter Data by T+3B 18:00 for	Publish Initial Statement T+3B Initial. Estimated by DReAMS. No Meter Data submission	Meter Data Due T+4B Statement Submit Meter Data by T+4B 18:00 for Recalc	Publish Initial statement T+6B T+9B Initial. Includes Estimation	Publish Recalc Statement T+8B	Meter data due for T+70B statement Submit Meter Data by T+6B 18:00 for Recalc	Publish Recalc Statement T+9B T+70B Recalculation	Publish Market Invoice
28-Aug-20	Friday		25-Aug				18-Aug			
29-Aug-20	Saturday									
30-Aug-20	Sunday									
31-Aug-20	Monday		26-Aug				19-Aug			
01-Sep-20	Tuesday						Monthly Recalc 18-Aug - 19-Aug			
02-Sep-20	Wednesday	1-Sep				25-Aug		25-Aug		
03-Sep-20	Thursday	2-Sep				26-Aug		26-Aug		
04-Sep-20	Friday		1-Sep			Monthly Initial 25-Aug - 26-Aug				
05-Sep-20	Saturday									
06-Sep-20	Sunday									
07-Sep-20	Monday						ISO Holiday			
08-Sep-20	Tuesday		2-Sep						25-Aug	
09-Sep-20	Wednesday								26-Aug	Daily Initial 25-Aug, 26-Aug Monthly Initial 25-Aug - 26-Aug Daily Recalc 18-Aug, 19-Aug Monthly Recalc 18-Aug - 19-Aug
10-Sep-20	Thursday					1-Sep		1-Sep	Monthly Recalc 25-Aug - 26-Aug	
11-Sep-20	Friday					2-Sep		2-Sep		
12-Sep-20	Saturday									
13-Sep-20	Sunday									
14-Sep-20	Monday					Monthly Initial 01-Sep - 02-Sep				
15-Sep-20	Tuesday									
16-Sep-20	Wednesday									Daily Initial 01-Sep, 02-Sep Monthly Initial 01-Sep - 02-Sep Daily Recalc 25-Aug, 26-Aug Monthly Recalc 25-Aug - 26-Aug
17-Sep-20	Thursday								1-Sep	
18-Sep-20	Friday								2-Sep	
19-Sep-20	Saturday								Monthly Recalc 01-Sep - 02-Sep	Daily Recalc 01-Sep, 02-Sep Monthly Recalc 01-Sep - 02-Sep
20-Sep-20	Sunday									

We are requesting topics

Upcoming Topics

Previous Topics

Published Knowledge Articles

- Real Time Storage
- No Pay
- Hybrid Policy
- Fall Release Projects

- Storage- [Link](#)
- Bid Cost Recovery - [Link](#)
- FERC 841- requested adjustments - [Link](#)

- 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) *-New*

⌘ Submit topics to us: twitter.com/isosettlements.com



ISO Computer Based Training Programs

Visit [caiso.com](http://www.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 20 computer based training modules on the ISO website covering:	
RC Customer Settlements	http://www.caiso.com/CBT/RC-Settlements/index.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

Webinars	
ISO Customer Readiness trainers have cancelled in person trainings	
Welcome to the ISO	July 9, 2020
ISO Training Workshop <i>(Day 3 Settlements)</i>	August 18 – 20, 2020
Welcome to the ISO Webinar	October 15, 2020
New initiatives training courses on the learning center web page	



Release Training Information for Settlements

Project Name	Current Training Date
FERC 841 – Requested Adjustments	07/15/2020
Market Settlement Timeline Transformation	07/20/2020
Excess Behind the Meter Production	07/21/2020
EIM Enhancements 2020	07/23/2020
Intertie Deviation Settlement	07/20/2020
Hybrid Resources Phase 1	3 rd quarter before Market Sim

Project Name	Past Training Date
ESDER Phase 3b – Load Shift Product	6/22/2020
CCDEBE 1	10/8/2019

Customer Readiness Spotlight On...

Energy Settlement Validation Practices

- Intro to Validation
- Charge Code Basics
- Validation Resources
- Charge Code Matrix



Energy Settlements Validation

Charge Codes Matrix

The ISO Charge Codes Matrix is a great tool for researching the charge codes that may be assessed to different types of SCs. The charge codes matrix is comprised of more columns than we can display! Below are some of the most important. **Click the numbers** to learn more.

ISO Market Charge Code Number	ISO Market Charge Code Name	Group	Effective Date	Termination Date	Status	Billable Quantity (1)
302	LI SC					Contracted Amount Dispatched
372	RI					HVAC Daily Metered Load Quantity
373	LI SC					HVAC Daily Metered Load Quantity
374	RI					% of the total TAC revenues due from the UDC's based on that PTO's % of the total TRS of all PTO's
375	LI RI					NA - this is a re-allocation of LVAC Amount
382	High Voltage Wheeling Allocation	WHEEL	4/1/2009	Open		combination of scheduled high and low voltage and real-time gross exports
383	Low Voltage Wheeling Allocation	WHEEL	4/1/2009	Open		combination of scheduled low voltage and real-time gross exports

Charge Code Timeline

Financial settlements are triggered by various events and deadlines during each hour. Let's look at a sample hour to learn about the energy charge codes associated with different settlement types. We'll use a simplified market timeline to explore the charge codes triggered at each point in the market run.

Click each box below to learn about the charge codes for each settlement type.

Day-Ahead Market	Real-Time Market	Meter Results / e-Tag	Administrative
Day-Ahead Energy, Congestion, and Losses	FMM Instructed Imbalance Energy	Flexible Ramping Product Allocation	Grid Management Charges
	RTD Instructed Imbalance Energy	LIE, LFE, and Offsets	Other Fees
	Flexible Ramping Product	Bid Cost Recovery	

FMM Instructed Imbalance Energy

The FMM market reflects increase or decrease of energy need compared to what is cleared in the IFM. The energy awards and FMM LMP prices are settled under CC 6460.

Validation Resources

Challenge yourself! Answer the question below. Select the correct resource(s), then click Submit.

Question 2 of 3: The Market Results Interface for Settlements (MRI-S) is located in the Market Participant Portal and provides SCs with settlement statements and invoices. What other information can be found on MRI-S?

- Settlement formulas, business rules
- Resource-specific MW awards, dispatches, and prices
- Meter data

Yes, that's correct!

You'll use MRI-S to access meter data.

Continue

Next SUG: July 22, 2020

Contact for questions & agenda requests: settlementuser@caiso.com

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Settlement References

- CRR1b Publishing Issue presented 6/24
- Knowledge Articles
- New EIM Settlements Training Resources
- ISO Settlements Twitter Page
- Ways to Participate in Settlements
- SUG meeting calendar for 2020

CRR 1b - Publishing Issue

In February 2020, we received a dispute regarding CRR 1b mismatches between CMRI and Settlements. After further research we found 40 TDs were impacted. The corrections will be reflected on the following Settlement statements:

Statement Reflected On	Trade Dates
T+18M	1/24 - 1/25/2019, 1/29 - 1/31/2019
T+18M	2/2/2019, 2/5 - 2/7/2019 and 2/11/2019
T+18M	3/22 - 3/23/2019 and 3/25 - 3/31/2019
T+18M	4/1 - 4/2/2019, 4/4 - 4/7/2019, 4/9 - 4/12/2019 and 4/14 - 4/16/2019
T+18M	5/1/2019, 5/7/2019 and 5/10/2019
T+9M	10/20/2019, 10/24 - 10/26/2019
T+9M	11/3/2019

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 *-New*
- Calculation of meter data for TG resources *-New*

California ISO Help Center Knowledge articles Cases Submit a

Search

Identifying

Search Results

All Knowledge Cases Collapse List

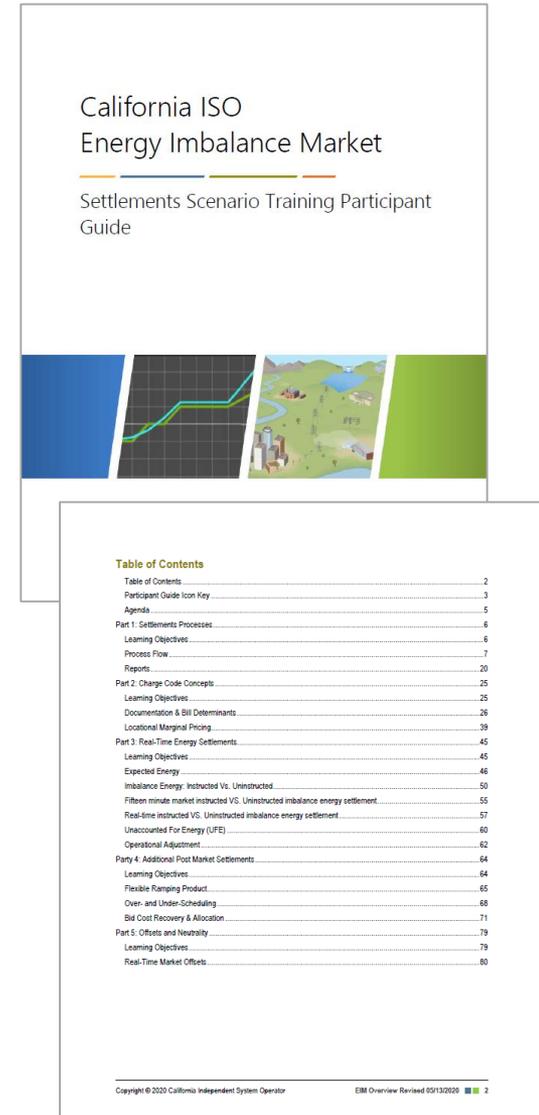
Knowledge
5+ Results - Sorted by Relevance View More

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

New EIM Settlements Training Resources

New Train-the-Trainer toolkit

- PowerPoint, participant guide, skill assessment and key, learning activity, training admin documents, etc.
- Available through Accellion
- Provided after Train-the-Trainer attendance (or in July for all other EIM customers)
 - Train-the-Trainer dates:
 - ~~June 15th~~ – ~~June 18th~~
 - ~~June 22nd~~ – ~~June 25th~~
 - **July 6th – July 9th**
 - Settlements training done on Day 3
- Recording of EIM Settlement Train-the-Trainer recording available on Accellion in Toolkit
- Email us (CustomerReadiness@caiso.com) for registration or Accellion access information



ISO Settlements Twitter

- Settlement related updates
- Market sim updates
- Note: Will not replace any existing media communications
- Please take the opportunity to follow [@ISOSettlements on Twitter](https://twitter.com/ISOSettlements) 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



Ways to participate in settlements

- ISO Settlements Twitter Page
 - <https://twitter.com/isosettlements>
 - Additional information see slide 16 and 17
- Visit the Settlements page
 - <http://www.caiso.com/market/Pages/Settlements/Default.aspx>
- Attend web conference meetings
 - Settlement User Group (SUG) bi-weekly meetings
 - Settlement only status updates
 - Initiative status with settlement updates
 - System change with settlement updates on independent releases
 - <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=ECD8A9C2-07CA-488C-8D1C-9F758595B487>
 - BPM PRR 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>

Settlement User Group Calendar

2020

Market Services

Settlement User Group Meetings

Note: dates subject to change; for the latest information please visit the Calendar on www.caiso.com.



California ISO

January						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

February						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

March						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

April						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

May						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

June						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

July						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

August						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

September						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

October						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

November						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

December						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Meeting
 Agenda posted
 Holiday

Settlement User Group

Thank you for participating in our call

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