Release User Group Agenda

December 12, 2023 *10:00 a.m.–11:00 a.m.* *(Pacific Time)*

Web Conference Information	Conference Call Information
Web Address: https://caiso.webex.com/caiso/j.php?MTID=m8f4dee2c7059898b3609c46be3cd2c20 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.	*1-844-621-3956 United States Toll Free* *+1-650-479-3208 United States Toll* *Meeting number (access code): 2491 042 7352*
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 publicly available on the ISO web page for a limited time following the meetings. The recordings, and any related transcriptions, should not be reprinted without the ISO's permission.	
https://www.caiso.com/informed/Pages/MeetingsEvents/UserGroupsRecurringMeetings/Default.aspx#RUG	
http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx	

Release Plan Summary

Release Communication

Independent 2023 Releases

- ✓ CMRI RTD Schedules Data - Market Alignment of WEIM Resource Awards During CAISO RTCD events to DOT & DOP coming from Advisory Data: 11/29/23
- ✓ Variable Operations & Maintenance Cost Review 12/1/23

Summer 2024 Release

Transmission Service & Market Scheduling Priorities Phase 2

Transmission Exchange Agreement

Independent 2024 Releases

URL & IP Changes (& AUP Changes) – Application Delivery Resiliency: API ✓11/15/23 & 01/09/24; UI 01/18/24

Transmission Register System Upgrade: Market Simulation 11/22/23; Production Jan 2024

WEIM Resource Sufficiency Evaluation Enhancements Phase 2 Track 2 – Post HASP Curtailments: Activation 02/21/24

Hybrid Resources Phase 2C – RIMS

Congestion Revenue Rights System Upgrade

CAISO Website Replacement

FERC 881 – Managing Transmission Line Ratings Track 1

FERC 881 – Managing Transmission Line Ratings Track 2

Spring 2026 Release

Day-Ahead Market Enhancements Activation

EDAM ISO BAA Participation Rules Track A

Extended Day-Ahead Market Activation

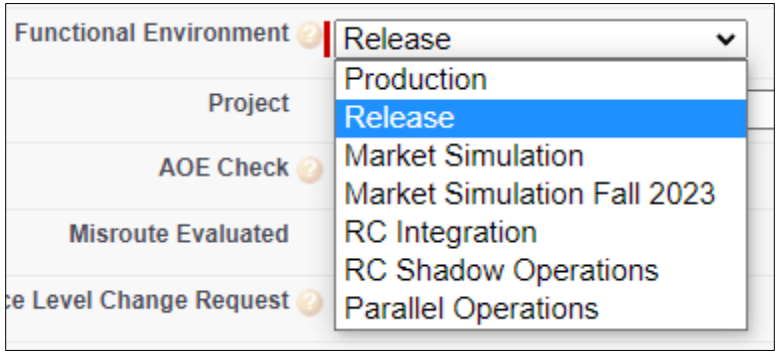
EDAM Onboarding Pacificorp

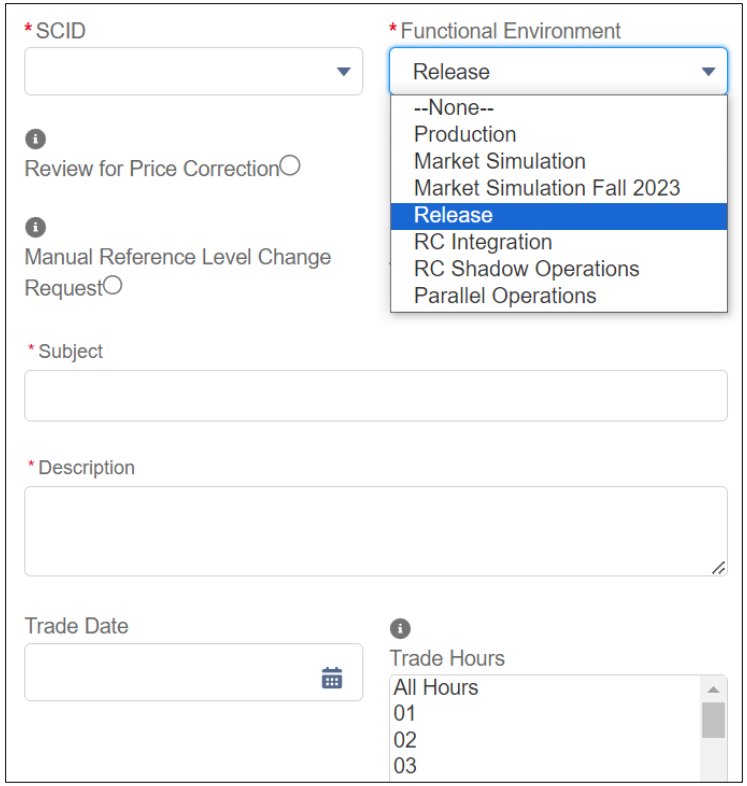
WEIM BHE Montana

Release Communication

- CIDI cases
  - **No Environment – Release:** (New option)
    - Inquiries that are related to releases, that are not directly related to Market Simulation issues.
    - Includes business requirements specifications (BRS) comments, implementation questions and feedback, etc.
  - **Market Simulation:**
    - Inquires that are related to the MAP-Stage environments (non-production).
  - **Market Simulation Fall 2023:**
    - Now that Fall 2023 Release is in Production, only the option of 'Market Simulation' remains as seasonal options are no longer applicable.

- Contact: release@caiso.com





Summer 2024 Release

Summer 2024 – Transmission Service & Market Scheduling Priorities Phase 2

Project Information	Details
High Level Business Need	Presents a long-term, durable framework to establish wheeling through scheduling priorities in the ISO markets that can further evolve with operational experience. It does not focus on, nor does it change, the processes for wheeling out or exporting from the ISO BAA.
High Level Project Scope	The following are the key design elements of the proposed framework for establishing wheeling through scheduling priority across the ISO system: • Calculating Available Transfer Capability (ATC) in Monthly & Daily Increments • Accessing and Reserving ATC • Transmission study and expansion process • Application of priorities in post-HASP process • Compensation framework for wheeling through scheduling priority
BPM Changes	• Market Instruments • Market Operations • Reliability Requirements • Settlements and Billing • Transmission Planning Process • Generator Interconnection and Deliverability Allocation Procedures
Tariff Changes	• §23.1, §23.2, §23.3, §23.4, §23.5, §23.6, §23.7 • §26.1.4.5 • §30.5.1 • §34.12.3 • §Appendix A • §Appendix L
Impacted Systems	• AIM • System for ATC calculation, access, and reservation • SIBR • RTM • Settlements • OASIS • ITS

Summer 2024 – Transmission Service & Market Scheduling Priorities Phase 2

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Feb 01, 2023	✓
External BRS	Post External BRS	TBD	
Settlements Config Guides	Post Draft Config Guides	Feb 12, 2024	
Tech Spec	Create ISO Interface Specifications	Yes	
Tariff	Filed ER23-2510 for Wheeling Through FERC Acceptance of ER 23-2510 Track 2 DTL Track 2 Revised DTL File Track 2	Jul 28, 2023 Oct 30, 2023 Jul 14, 2023 Oct 05, 2023 Jan 2024	✓ ✓ ✓ ✓
BPMs	Draft BPM changes – Market Instruments Draft BPM changes – Market Operations Draft BPM changes – Reliability Requirements Draft BPM changes – Settlements and Billing Draft BPM changes – Transmission Planning Process Draft BPM changes – Generator Interconnection and Deliverability Allocation Procedures	Yes	
Production Activation	Transmission Service & Market Scheduling Priorities Phase 2 – Activate daily and long-term increment calculations	Jun 01, 2023	

Summer 2024 – Transmission Exchange Agreement

Project Information	Details/Date
High Level Business Problem or Need	The TEA is expiring in 2024 and absent WAPA's ability to resell their capacity on the Pacific AC Intertie ("PACI") #1 line which is owned and operated by WAPA-SNR and within the CAISO BAA they will move the line to the BANC BAA and the ISO will lose 1200 MW transfer capability at Malin.
High Level Project Scope	• WAPA needs functionality to sell their TOR (using ETC/TOR terminology instead of CRN) to other parties on their OASIS. • If the TOR rights are sold then WAPA will notify the CAISO to provide the purchaser the hedging and scheduling priority opportunity provided all ETCs/TORs. • The market and settlement systems need to be able to "move" the CRN from the WAPA CRN to the purchaser SCIDs so that the settlement to the purchaser SCID reverse the costs of transmission access charge and congestion (aka the perfect hedge) and the IFM and RTM provide a high scheduling priority. • WAPA will not take on the obligation to settle with their purchaser. • WAPA can sell any increments of MWs up to their 400 MW ownership rights. Therefore, the solution needs to be flexible enough to allow the "existing" TORs to vary the MWs capabilities. [Note: We can require restrictions, if required – e.g. no less than 5 MW increments] • WAPA's functionality allows them to schedule between Malin and Round Mountain, and Malin and Tracy. This would be the source and sink that that functionality needs to provide. • If there are outages on the line, the curtailment should be consistent with current practice.
BPM Changes	Settlements Configuration Guides
Tariff Changes	N/A
Impacted Systems	SIBR, DAM/RTM, Settlements, ITS, MF

Summer 2024 – Transmission Exchange Agreement

Milestone Type	Milestone Name	Dates	Status
External BRS	Post External BRS	TBD	
Settlements Config Guides	Post Draft Config Guides	Feb 12, 2024	
Tech Spec	Create ISO Interface Specifications	Yes	
Tariff	NA	NA	
BPMs	Draft BPM changes – Settlements & Billing	Yes	
Production Activation	Transmission Exchange Agreement Renegotiation	Jun 01, 2024	

Independent 2024 Releases

UI & API URL & IP Changes (Application Delivery Resiliency)

- Areas
  - Access Policy Manager - Application Authentication
  - Local Traffic Manager - Load Balancing
  - Application Security Manager - Web Application Firewall

- User Impacts & Actions
  - New IP ranges requiring firewall changes
    - Please open the entire 45.42.16.0/21 network on ports 80 & 443 for our new IP space
  - New URLs for UIs and APIs requiring cutover
  - No application functionality changes expected
  - No provisioning changes expected

UI & API URL & IP Changes (Application Delivery Resiliency)

Current API Notice: The California ISO implementation of the first phase of the Production Application Programming Interface (API) Web Service (WS) Uniform Resource Locator (URL) cutovers is now completed as of for Nov. 15, 2023 and has made the new Production API WS URLs available. The next and final phase of the Production API WS URL cutovers is now scheduled for Jan. 9, 2024 and will move the existing Production API WS URLs to new infrastructure.

Phase 1 – Nov. 15, 2023 COMPLETE

- No changes to existing API WS URLs: https://ws.caiso.com/sst/<SYSTEM>/<SERVICE>
- New API WS URLsare available: https://ws.**prod**.caiso.com/sst/<SYSTEM>/<SERVICE>
- Access to the new API WS URLs consist of the following that will require users to be configured per below:
    - **New IPs: Please open the entire 45.42.16.0/21 network on ports 80 & 443 for the new CAISO IP space**
    - **New Certificate Authority (was Verizon and is now Entrust): Please add the two Entrust certificates to your application trust stores on your servers**
    - **Global Rate Limit**
        - 30 per second across all the WS below combined per TCP source supported on the WS endpoint (1800 connections per minute); this includes submits and retrieves:
            - BAAOP/BSAP/CIRA/CMRI/DRRS/EIDE/ALFS (& FDR)/MF/PISOA/RCBSAP/RCSERVICES (RCEIDE)/SIBR/STLMT/OMS/ECIC
    - **Service-Level Acceptable Use Policy (AUP) for CMRI, DRRS, and MRI-S**
        - In addition to the Global Rate Limit above, these systems will have an additional layer of protection
        - CMRI
            - retrieves will leverage a 5-second period for enforcement
            - there are no CMRI submits
        - DRRS
            - Both submits and retrieves will leverage a 30-second period for enforcement
        - MRI-S (STLMT)
            - Retrieves of METER DATA will leverage a 30-second period for enforcement
            - submits will not have any additional layer of protection other than the Global Rate Limit above

Phase 2 – Jan. 9, 2024

- No additional changes to the new API WS URLs made available in Phase 1: https://ws.**prod**.caiso.com/sst/<SYSTEM>/<SERVICE>
- The existing API WS URLs: https://ws.caiso.com/sst/<SYSTEM>/<SERVICE> will be cutover to new underlying infrastructure
- Access to the existing API WS URLs will now also require users to be configured per below (same as above):
    - New IPs
    - New Certificate Authority (was Verizon and is now Entrust)
    - Global Rate Limit
    - Service-Level Acceptable Use Policy (AUP) for CMRI, DRRS, and MRI-S

Customers are encouraged to contact Trang Vo at tvo@caiso.com or release@caiso.com and/or submit a CIDI case for any questions.

UI & API URL & IP Changes (Application Delivery Resiliency)

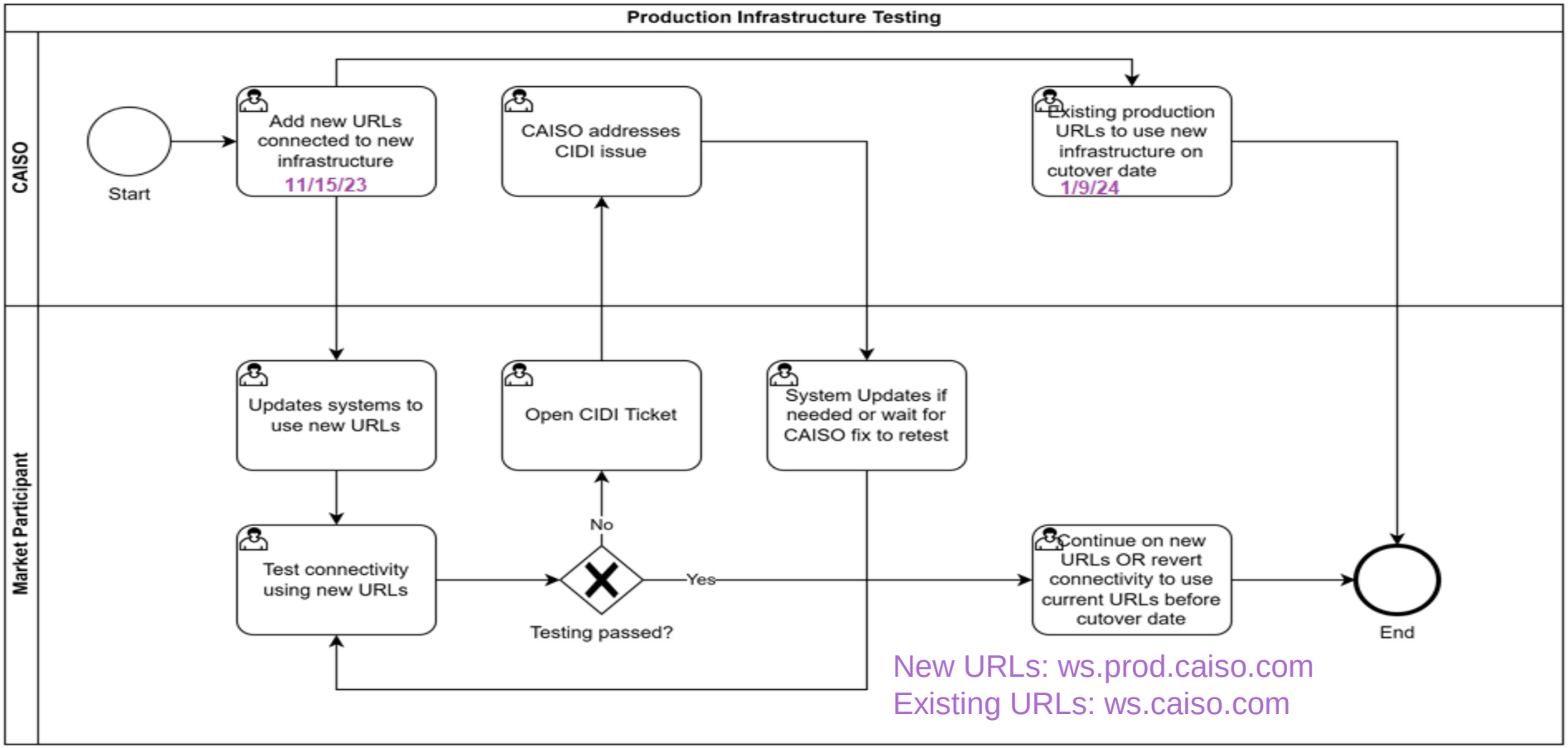
Production API Transition Plan – **Actions Necessary for API Users**

- SOFT CUTOVER: Production new ~~temporary/~~transition API URLs (ws.prod.caiso) ***as of Nov 15, 2023*** to transition
- **HARD CUTOVER: Production current/existing (ws.caiso) API URLs cutover *Jan 9, 2024***
  - **New infrastructure**
  - **New IPs**
  - **New Certificate Authority (Entrust)**
  - **Service-Level AUP for CMRI/DRRS/MRI-S**
- ~~Production new temporary/transition API URLs to be deprecated at a future date~~
- **Production new API URLs (ws.prod.caiso) will remain available indefinitely; users can continue using the new URLs or repoint to the original API URLs (ws.caiso)**
- Please open the entire 45.42.16.0/21 network on ports 80 & 443 for our new IP space to access new API URLs

- The Production transition and cut-over will be different than how MAP-STAGE occurred. The new APIs are available as of 11/15/23. There will be no changes to the Production existing API URLs until target 1/9/24.

UI & API URL & IP Changes (Application Delivery Resiliency)

Customers should cut over to the new URLs ws.prod.caiso.com starting 11/15/23 and as soon as possible before 1/9/24.



UI & API URL & IP Changes (Application Delivery Resiliency)

1. 1) Here are the API URL formats for non-Production & Production; note what is available/permanent

	Old URL & Infrastructure	New URL & Infrastructure	Existing URL to Move to New Infrastructure
MAPSTAGE	Deprecated & no longer available as of 9/21/23 • https://wsmap.caiso.com/sst/<SYSTEM>/<SERVICE> • https://wsmap.caiso.com/sst/<SYSTEM>/<SERVICE>_DocAttach	NA	Available permanently since 5/18/23 • https://mapstage-ws.caiso.com/sst/<SYSTEM>/<SERVICE> • https://mapstage-ws.caiso.com/sst/<SYSTEM>/<SERVICE>_DocAttach
PRODUCTION	Available now on existing infrastructure • https://ws.caiso.com/sst/<SYSTEM>/<SERVICE> • https://ws.caiso.com/sst/<SYSTEM>/<SERVICE>_DocAttach	To be made available at a future date target 11/15/23 on new infrastructure to run in parallel with the left cell to support transition/testing, for a limited time • https://ws.prod.caiso.com/sst/<SYSTEM>/<SERVICE> • https://ws.prod.caiso.com/sst/<SYSTEM>/<SERVICE>_DocAttach	Original URLs to be cut-over to new infrastructure at a future date target 1/9/24 • https://ws.caiso.com/sst/<SYSTEM>/<SERVICE> • https://ws.caiso.com/sst/<SYSTEM>/<SERVICE>_DocAttach

2. As mentioned on the call and shown above, there are URL/IP changes in flight now for the APIs
    1. Please open the entire 45.42.16.0/21 network on ports 80 & 443 for our new IP space
    2. There is a new Certificate Authority for the new APIs (changed from Verizon to Entrust)
    3. API Acceptable Use Policy: In addition the existing global rate limit of 30 per second across all the apps combined supported on the WS endpoint (1800 connections per minute), here are additional protections within these apps on the new URLs
        1. These will return a SOAP fault with AUP fails:
        2. <SOAP-ENV:Fault>
            <faultcode>SOAP-ENV:Server</faultcode>
            <faultstring xml:lang="en">429: CAISO Acceptable Use Policy Violation. Please retry your request after <n> seconds.</faultstring>
            <detail>
        3. Apps
            1. CMRI
            2. DRRS
            3. STLMT
    4. Impacted APIs on next slide

UI & API URL & IP Changes (Application Delivery Resiliency)

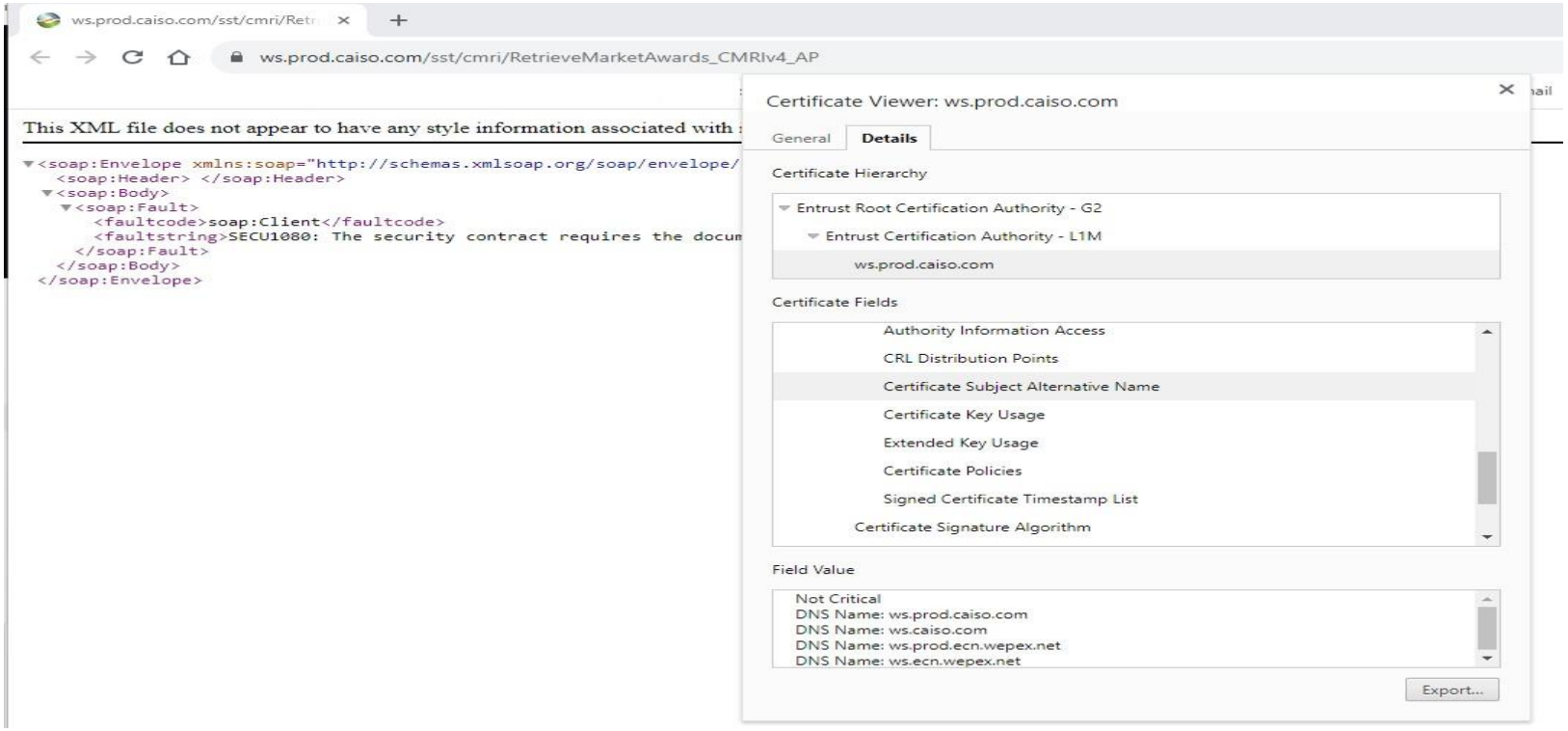
	Old URL & Infrastructure	New URL & Infrastructure	Existing URL to Move to New Infrastructure
MAPSTAGE	Deprecated & no longer available as of 9/21/23 • https://wsmap.caiso.com/sst/<SYSTEM>/<SERVICE> • https://wsmap.caiso.com/sst/<SYSTEM>/<SERVICE>_DocAttach	NA	Available permanently since 5/18/23 • https://mapstage-ws.caiso.com/sst/<SYSTEM>/<SERVICE> • https://mapstage-ws.caiso.com/sst/<SYSTEM>/<SERVICE>_DocAttach
PRODUCTION	Available now on existing infrastructure • https://ws.caiso.com/sst/<SYSTEM>/<SERVICE> • https://ws.caiso.com/sst/<SYSTEM>/<SERVICE>_DocAttach	To be made available at a future date target 11/15/23 on new infrastructure to run in parallel with the left cell to support transition/testing, for a limited time • https://ws.prod.caiso.com/sst/<SYSTEM>/<SERVICE> • https://ws.prod.caiso.com/sst/<SYSTEM>/<SERVICE>_DocAttach	Original URLs to be cut-over to new infrastructure at a future date target 12/21/23 • https://ws.caiso.com/sst/<SYSTEM>/<SERVICE> • https://ws.caiso.com/sst/<SYSTEM>/<SERVICE>_DocAttach

Production	Existing Production API	New/Temporary for Transition Production API	Existing/Original Production API URLs to be cut over to new infrastructure and IPs
BAAOP	https://ws.caiso.com/sst/baaop	https://ws.prod.caiso.com/sst/baaop	https://ws.caiso.com/sst/baaop
BSAP	https://ws.caiso.com/sst/bsap	https://ws.prod.caiso.com/sst/bsap	https://ws.caiso.com/sst/bsap
CIRA	https://ws.caiso.com/sst/cira	https://ws.prod.caiso.com/sst/cira	https://ws.caiso.com/sst/cira
CMRI	https://ws.caiso.com/sst/cmri	https://ws.prod.caiso.com/sst/cmri	https://ws.caiso.com/sst/cmri
DRRS	https://ws.caiso.com/sst/drrs	https://ws.prod.caiso.com/sst/drrs	https://ws.caiso.com/sst/drrs
EIDE	https://ws.caiso.com/sst/eide	https://ws.prod.caiso.com/sst/eide	https://ws.caiso.com/sst/eide
ALFS (& FDR)	https://ws.caiso.com/sst/runtime.asvc	https://ws.prod.caiso.com/sst/runtime.asvc	https://ws.caiso.com/sst/runtime.asvc
MF	https://ws.caiso.com/sst/runtime.asvc	https://ws.prod.caiso.com/sst/runtime.asvc	https://ws.caiso.com/sst/runtime.asvc
PISOA	https://ws.caiso.com/sst/runtime.asvc	https://ws.prod.caiso.com/sst/runtime.asvc	https://ws.caiso.com/sst/runtime.asvc
RCBSAP	https://ws.caiso.com/sst/rcbsap	https://ws.prod.caiso.com/sst/rcbsap	https://ws.caiso.com/sst/rcbsap
RCSERVICES (RCEIDE)	https://ws.caiso.com/sst/rcservices	https://ws.prod.caiso.com/sst/rcservices	https://ws.caiso.com/sst/rcservices
SIBR	https://ws.caiso.com/sst/sibr	https://ws.prod.caiso.com/sst/sibr	https://ws.caiso.com/sst/sibr
STLMT	https://ws.caiso.com/sst/stlmt	https://ws.prod.caiso.com/sst/stlmt	https://ws.caiso.com/sst/stlmt
OMS	https://ws.caiso.com/sst/weboms	https://ws.prod.caiso.com/sst/weboms	https://ws.caiso.com/sst/weboms
ECIC	https://ws.caiso.com/sst/ecic	https://ws.prod.caiso.com/sst/ecic	https://ws.caiso.com/sst/ecic

UI & API URL & IP Changes (Application Delivery Resiliency) – Certification Authority

- New Certificate Authority
  - There is a new certificate authority for the new API URL infrastructure: It was Verizon and is now Entrust
  - Please add the two certificates to your application trust stores on your servers to access the new API URL infrastructure
  - The new Production API URLs and existing Production API URLs after cutover have a different Root and Intermediate certificate:
    - Entrust Root Certification Authority – G2
    - Entrust Certification Authority – L1M

UI & API URL & IP Changes (Application Delivery Resiliency) – Certification Authority



UI & API URL & IP Changes (Application Delivery Resiliency) – Certification Authority Questions

What do API customers need to do to access new URLs and maintain access to existing URLs after the cutover?

- Add the two Entrust certificates to your application trust stores on your servers (see image on previous slide)

Will customers be able to access the current Production API URLs (pre-cutover) after adding the two Entrust certificates?

- Yes, this is an addition of the two Entrust certificates to your trust store, but the existing Verizon certificates will still be there and work for the current Production API URLs pre-cutover

When should customers add the two Entrust certificates to their Production server application trust stores?

- This can be done now without impacting Production API access (see above), and should be done prior to 11/9 to access the new Production API URLs (ws.prod.caiso, and should be done NLT 12/20 to avoid impacts to Production API access on the existing API URLs (ws.caiso)

How will user certificates be impacted?

- No changes needed to user certificates for the Production API URL cutover
- User certificates are also changing from Verizon to Entrust as they expire and are renewed, but do not need to be on Entrust prior to the Production API URL cutover
- For example, if a user has an existing Verizon user certificate that expires mid-2024, that Verizon user certificate will still be able to access the new Production API URL infrastructure (11/9/23 onwards for new URLs, and 12/21/23 onwards for existing URLs)

UI & API URL & IP Changes (Application Delivery Resiliency) - New Certification Authority

References

- Entrust L1M Certificate Authority: http://web.entrust.com/subca-certificates/L1M-G2-Xcert_20141215.cer?_gl=1*1pabf82*_ga*MTk2NDQzNTE0LjE2ODc0NjQ1NjA.*_ga_6QRW66BW5T*MTY4NzQ2NDU1OS4xLjEuMTY4NzQ2NDU4MS4zOC4wLjA.&_ga=2.121940939.1908197984.1687464560-196443514.1687464560

- Entrust Root Certificate Authority: https://web.entrust.com/root-certificates/entrust_g2_ca.cer?_gl=1*1t3efhy*_ga*MTk2NDQzNTE0LjE2ODc0NjQ1NjA.*_ga_6QRW66BW5T*MTY4NzQ2NDU1OS4xLjEuMTY4NzQ2NDgxMy41NS4wLjA.&_ga=2.127397581.1908197984.1687464560-196443514.1687464560

- Parent pages these came from:
  - https://www.entrust.com/knowledgebase/ssl/entrust-certificate-services-subordinate-cas
  - https://www.entrust.com/resources/certificate-solutions/tools/root-certificate-downloads

UI & API URL & IP Changes

Phase 1: Deployment for new API URLs

- CAISO previously sent communications on the soft cutover for the new API URLs in the MAP Stage environment. Market Participants are required to validate access and transition to the new API URLs before August 15, 2023. **The old API URLs in MAP Stage are no longer available as of September 1, 2023**. For Production, there are no changes to the current/existing API URLs; however, the IP addresses and infrastructure will be changed.

Phase 2: Deployment for new UI URLs

- Starting on July, 27, 2023, some of the ISO applications will be available for testing starting in the MAP Stage environment and then Production. Application access is based on the user's provisioning. No application down time is expected. We will send additional communication for the remaining UI URLs once they are ready for validation.

Action requested:

- Market Participants can begin accessing the new UI URLs in parallel with the current UI URLs for a window of time.
- The timeline to validate access and transition to the new UI URLs for each environment is shorter than the API timeline; therefore, action is needed sooner.
- Once the new UI URLs are deployed into Production, Market Participants have until Thursday, January 18, 2024 to validate and transition to the new UI URLs.

Applications & Environments	Deployment Start Dates	New User Interface (UI) URLs	Deprecation of Old URL
Balancing Area Authority Operations Portal (BAAOP)			
MAP Stage	Fri 7/28/23	https://mapstage-baaop.caiso.com	Fri 12/8/23
Production	Wed 9/20/23	https://baaop.caiso.com	Thu 1/18/24
Base Schedule Aggregation Portal (BSAP)			
MAP Stage	Fri 7/28/23	https://mapstage-bsap.caiso.com	Fri 12/8/23
Production	Mon 10/16/23	https://bsap.caiso.com	Thu 1/18/24
Reliability Coordinator Base Schedule Aggregation Portal (RCBSAP)			
MAP Stage	Fri 7/28/23	https://mapstage-rcbsap.caiso.com	Fri 12/8/23
Production	Tue 10/26/23	https://rcbsap.caiso.com	Thu 1/18/24
Schedule Infrastructure & Business Rules (SIBR)			
MAP Stage	Fri 7/28/23	https://mapstage-sibr.caiso.com	Fri 12/8/23
Production	Mon 10/16/23	https://sibr.caiso.com	Thu 1/18/24
Reporting (Includes SIBR Reports, Transmission Registry, RIMS, Master File, and FSP folder)			
MAP Stage	Mon 7/31/23	https://mapstage-reporting.caiso.com	Fri 12/8/23
Production	Tue 12/5/23	https://reporting.caiso.com	Thu 1/18/24
Market Participant Portal (MPP)			
MAP Stage	Thu 12/14/23	https://mapstage-mpp.caiso.com	
Production	Tue 12/19/23	https://mpp.caiso.com	Thu 1/18/24
Customer Market Results Interface (CMRI)			
MAP Stage	Thu 8/3/23	https://mapstage-cmri.caiso.com	Fri 12/8/23
Production	Thu 10/19/23	https://cmri.caiso.com	Thu 1/18/24
Congestion Revenue Rights (CRR)			
MAP Stage	Mon 8/7/23	https://mapstage-crr.caiso.com	Fri 12/8/23
Production	Thu 10/19/23	https://crr.caiso.com	Thu 1/18/24
WEIM Portal			
MAP Stage	**Done**	https://mapstage-weim.caiso.com	Fri 12/8/23
Production	**Done**	https://weim.caiso.com	Thu 1/18/24
Master File (MF)			
MAP Stage	Wed 8/9/23	https://mapstage-mf.caiso.com	Fri 12/8/23
Production	Thu 10/19/23	https://mf.caiso.com	Thu 1/18/24
Transmission Registry (TR)			
MAP Stage	Tue 9/5/23	https://mapstage-tr.caiso.com/	Fri 12/8/23
Production	TBD	https://tr.caiso.com	Thu 1/18/24
Path Limit Calculator (PLC)			
Production	Thu 10/19/23	https://plc.caiso.com/	Thu 1/18/24
Hosted Advanced Network Applications (HANA) Base / HANA Study			
Production	Tue 10/26/23	https://hana.caiso.com/ https://hanastudy.caiso.com/	Thu 1/18/24

2024 – Transmission Register System Upgrade

Project Information	Details/Date
High Level Project Scope	TR Framework Upgrade and corresponding provisioning changes
Impacted Systems	TR, AIM

Milestone Type	Milestone Name	Dates	Status
BRS	BRS	NA	NA
User Guides	http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx		✓
	Updated Transmission Register PTO Administrator User Manual	Nov 20, 2023	✓
	Updated Transmission Register Component Linking Manual	Nov 20, 2023	✓
	Updated Transmission Register Autoloader User Manual	Nov 20, 2023	✓
	Updated Transmission Register CAISO & PTO General User Manual	Nov 20, 2023	✓
Training	Training	Nov 15, 2023	✓
Market Sim	Market Sim Window	Nov 27, 2023 – Dec 15, 2023	
Production	Production	Jan 19, 2024	

Feb 2024 – WEIM Resource Sufficiency Evaluation Enhancements Phase 2 Track 2

Project Information	Details

High Level Project Scope	• **Track-2**
	  • Item2A – Clarification of Post-HASP Block Hour Low-Priority Export
	  • Operator-Driven Low-Priority Export Curtailment
	  • CAISO operator's ability to initiate pro-rata curtailment based on identified MW, given the following priority order:
	  • RTECON (RT economic hourly block export schedules that clear HASP).
	  • RTLPT (RT Self-Schedule hourly block export schedules not backed by Generation from non-RA Capacity and cleared HASP).
	  • Non-high-priority DA export [i.e. DAECON (DA economic hourly block export schedules that clear both RUC and HASP), or DALPT (DA hourly block export schedules not backed by Generation from non-RA Capacity that also cleared both RUC and HASP and are protected Self-Schedules)]
	  • CAISO operator's ability to identify/filter exports by market priority types as well as "Firm Provisional Energy (G-FP)" eTag identifier.
	  • Publish resource-specific market priority types and their associated MW data to ADS.
	• Item2B – Develop MF resource identification Capacity Test Failed-to-Start Rule Exemption flag to allow SCs of WEIM and CISO short start units that start with non-positive telemetry to identify specific resources that will be exempted from this functionality in RSE Capacity test. (Implemented in Phase 1 – enhancements needed)

BPM Changes	WEIM, Market Instruments, Market Operations
Tariff Changes	Yes
Impacted Systems	MF, Market, ITS, ADS

Feb 2024 – WEIM Resource Sufficiency Evaluation Enhancements Phase 2 Track 2

System	High Level Changes
MF	• Definition and Submission of Resource-Specific Capacity Test Failed-to-Start Rule Exemption Flag via GRDT • Make Resource-Specific Capacity Test Failed-to-Start Rule Exemption flag accessible to downstream systems.
ITS	• Clarification of Post-HASP Block Hour Low-Priority Export • Consume DAM Resource-Specific Market Priority Types and Resource-specific RUC Energy Awards from RUC. • Consume All Resource-Specific Market Priority Types from RTM. • SCs shall be required to submit Misc Info field Prior Type attribute for “Firm Provisional Energy (G-FP)” e-tags to identify RTECON, DAECON, RTLPT, DALPT. • SCs shall be required to submit Misc Info field Prior Type attribute for “Firm Energy (G-F)” e-tags to identify RTPT, DAPT. • Validate submitted export e-Tags against data received from RUC and RTM to approve/deny and adjust (if warranted) the submitted e-Tags.
Market	• Access Resource-Specific Capacity Test Failed-to-Start Rule Exemption flag from MF. • Exempt Specific Resources from Capacity Test Failed-to-Start Rule/Functionality. • Clarification of Post-HASP Block Hour Low-Priority Export • Broadcast All Resource-specific market priority types to ITS (from RTM).

ADS	• Clarification of Post-HASP Block Hour Low-Priority Export
	  • Consume Resource-Specific Market Priority Types and their Associated MW Data from RTM.
	  • Publish Resource-Specific Market Priority Types and their Associated MW Data.
	  • Include Resource-Specific Market Priority Types in ADS Query Functionality.

Feb 2024 – WEIM Resource Sufficiency Evaluation Enhancements Phase 2 Track 2

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval WEIM Governing Board Approval	Dec 14, 2022	✓
External BRS	Post External BRS Post External BRS v1.1 Post External BRS v1.2 Post External BRS v1.3 Post External BRS v1.4 Post External BRS v1.41	Mar 10, 2023 Mar 31, 2023 Jun 27, 2023 Sep 05, 2023 Sep 20, 2023 Sep 21, 2023	✓ ✓ ✓ ✓ ✓ ✓
Settlements Config Guides	NA	NA	
Tech Spec	ADS CMRI MFRDT Tech Spec MFRDT File Draft RDT Definitions Draft	Aug 10, 2023 Aug 10, 2023 Aug 10, 2023 Aug 22, 2023 Aug 29, 2023	✓ ✓ ✓ ✓ ✓
Tariff	Tariff (NA, and NA for activation change from Fall 2023 Release to Feb 2023)	NA	
BPMs	Draft BPM changes – Market Instruments PRR 1531 Draft BPM changes – WEIM PRR 1532 Draft BPM changes – Market Operations PRR 1533 Draft BPM changes – Market Instruments PRR 1537 Draft BPM changes – Market Operations PRR 1536	Aug 23, 2023 Aug 24, 2023 Aug 24, 2023 Aug 25, 2023 Aug 24, 2023	✓ ✓ ✓ ✓ ✓
Training	Training	Sep 13, 2023	✓
Market Sim Scenarios	Market Sim Scenarios	Jul 28, 2023 Aug 23, 2023 Sep 08, 2023	✓ ✓ ✓
Market Sim	Market Sim Window Market Sim – Pro Rata Curtailment	Sep 25, 2023 – Oct 13, 2023 Jan 08, 2024 – Jan 31, 2024	✓
Production Activation	Resource Sufficiency Evaluation Enhancements Phase 2 Track 2	Feb 21, 2024	

2024 – Hybrid Resources 2C RIMS

Project Information	Details/Date
High Level Business Problem or Need	The ISO launched this stakeholder initiative to identify new or enhanced market rules and business processes needed to accommodate hybrid resources, resources that consist of two sets of market rule changes that will facilitate mixed-fuel type (hybrid and co-located resources) project participation in the ISO markets. Prior to this initiative, Phase 1 identified a first set of modifications generally concerned with setting up and operating co-located resources. Building on phase 1, Phase 2 focuses on modifications that will explore how hybrid generation resources can be registered and configured to operate within the ISO market. The initiative will further develop solutions allowing developers to maximize the benefits of their resource's configuration. Additionally, hybrid resource configurations also raise new operational and forecasting challenges that the ISO plans to address during this initiative.
High Level Project Scope	With this initiative, there's an opportunity to increase storage and the number of hybrid resources that can connect to the ISO grid. Currently the interconnection queue includes more than 24,000 MW of mixed fuel projects and nearly 20,000 MW of storage which represents roughly half of all generation in the current interconnection queue.
BPM Changes	Settlements & Billing
Impacted Systems	Summer 2023: Settlements Fall 2023: Metered Quantities for Hybrids **Independent 2024: RIMS** Completed: Today's Outlook, ISO Today Mobile Application, Reports
Requirements	http://www.caiso.com/Documents/BusinessRequirementsSpecifications-HybridResourcesPhase2.pdf

2024 – Hybrid Resources 2C RIMS

Milestone Type	Milestone Name	Dates	Status
External BRS	Publish External BRS	Jan 31, 2023	✓
Settlements Config Guides	NA for RIMS	NA	
Tech Spec	Create and Publish ISO Interface Spec (Tech Specs)	NA	
Market Sim	Market Sim Window – RIMS	NA	
Production Activation	Hybrid Resources 2C – RIMS	Q3/Q4 2024	

2024 - Congestion Revenue Rights (CRR) Upgrade

Project Information	Details/Date
High Level Project Scope	The Congestion Revenue Rights (CRR) system was implemented by CAISO in 2008 as part of the Market Redesign and Technology Upgrade (MRTU) implementation. The current CRR system is at its end of life, does not have the flexibility to accommodate future policy changes and requires the ISO to calculate data and run processes manually outside the current system to produce a successful CRR Auction. The CAISO has decided on a significant upgrade of the existing CRR system and adopt the latest technology stack aligned with CAISO's technology standards, consolidate all CRR related functions, minimize human errors, reduce processing time, eliminate manual workarounds, and positions the system to accommodate policy changes down the road. **Congestion Revenue Rights (CRR) system replacement project scope is the roll-out of a:** • Brand new user-interface (UI) system with an updated new look-and-feel, to replace the existing legacy system implemented during the MRTU 2008 go-live and brought up to current ISO technology standards • Set of application-programming interfaces (APIs) to enable integration between ISO and market participant systems **Overall, to support the following in one consolidated CRR external-facing system:** • Annual/Monthly Auction and Allocation market participant bid submission and results retrieval • Load data submission by CRR LSEs, CEC • Load migration data submission by CRR UDCs • Secured "Congestion Revenue Rights Full Network Model" information access • Private and public access of CRR market input and output information
BPM Changes	Congestion Revenue Rights • Enhancements made to the new CRR product. • Automatic publishing of CRR market results. • Automatic CRR notification. • New CRR schedule calendar. • New CRR FNM access. • New CRR data submission and download interface UI/API. • New CRR market results interface. • Load Migration
Tariff Change	No
Impacted Systems	CRR, AIM, CMRI, OASIS, CTS, Market Clearing, EMMS, IFM/RTN, MQS, Master File, MPP, Settlements, WebOMS, ETCC.

2024 - Congestion Revenue Rights (CRR) Upgrade

System	High Level Changes
CRR	Significant system upgrade including: • Enhancements made to the new CRR application. • Automatic publishing of CRR market results. • Automatic CRR notification. • New CRR schedule calendar. • New CRR FNM access. • New CRR data submission and download interface UI/API. • Other TBDs identified through BRS development.
AIM	• New users and roles to support new CRR functionality
CMRI	• Full and incremental Payload publishing • Publish CRR Awards payload on event-driven, ad-hoc or scheduled basis • Publish CRR Awards payload on event-driven, ad-hoc or scheduled basis
OASIS	• Publish CRR Calendar, and all available CRR market names, and credit margin information, 3 year historical expected value.. • Allow authorized users to publish CRR inventory payloads • Broadcast the following: set aside values, the results of all CRR markets, retired pnode/anode mapping, binding constraints, initial and updated CRR source and sink list for each CRR market,
CTS	• Broadcast
EMMS	• CRR will consume data from EMMS
IFM/RTN	• CRR will consume data from IFM/RTN
MQS	• MQS will consume and process SCID in a new format • MQS will consume ownership payload in bulk
Master File	• Master File will be modified as needed to support the new CRR functionality
MPP	• CRR will provide pre-configured external reports
Settlement	• Settlements will be modified as needed to support the new CRR functionality
WebOMS	• CRR will consume data from WebOMS
ETCC	• CRR will consume data from ETCC

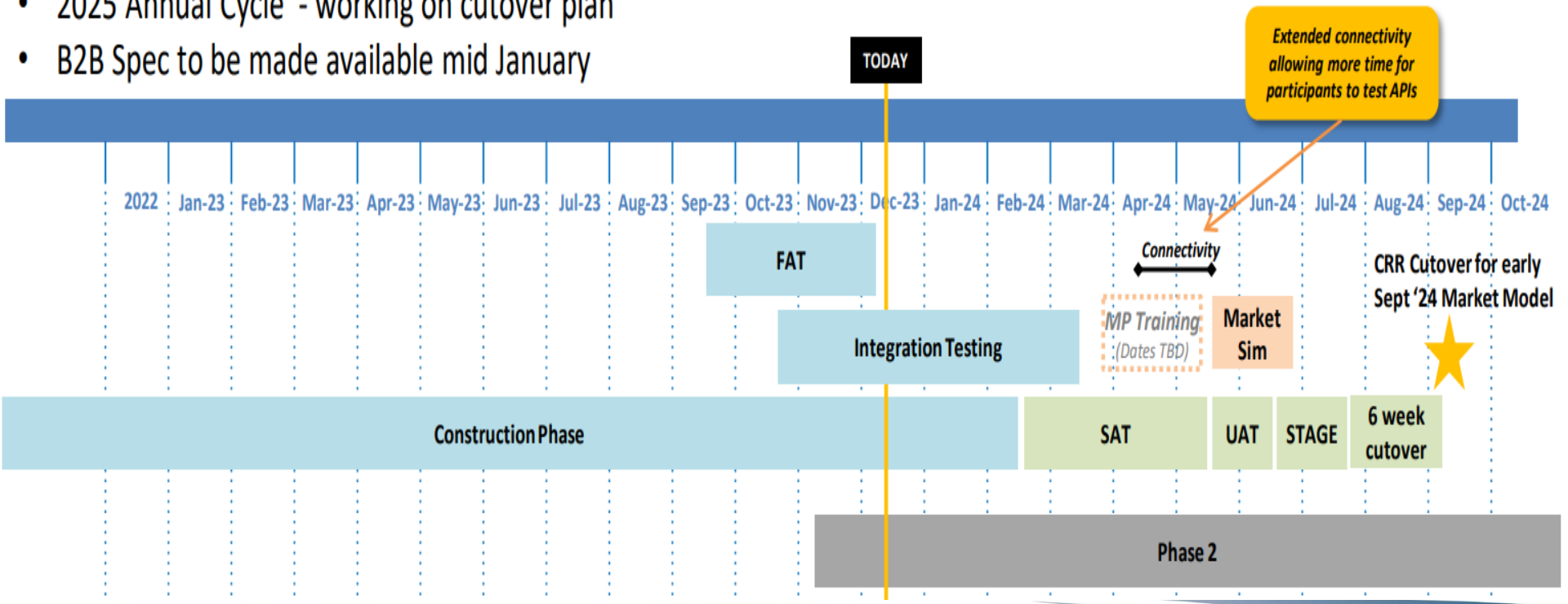
2024 - Congestion Revenue Rights (CRR) Upgrade

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	NA	
External BRS	Publish External BRS BRS Revision v1.3	Nov 16, 2022 Mar 29, 2023	✓ ✓
Config Guides	Post Draft Config Guides	Yes	
Tech Spec	Publish Technical Specification	Feb 24, 2023	✓
Deployment Plan	Draft Deployment Plan	Yes	
Training	Training	Yes	
Market Sim	Market Sim	May 2024 – Jun 2024	
Go Live	Go Live to start 6-week cutover - August 2024 monthly allocation and auction markets on new system	Jul 23, 2024	
Customer Partnership Group	**Next CPG**	**Dec 13, 2023**	

2024 - Congestion Revenue Rights (CRR) Upgrade

Updated December 2023

- Factory Acceptance Testing (FAT) completed
- Integration testing in progress and on-track for April Connectivity Testing
- Start of functional testing (Site Acceptance Testing - SAT) and other items shifted
- Target go live in July 23rd to start 6 week cutover
  - August 2024, monthly allocation and auction markets on new system
- 2025 Annual Cycle - working on cutover plan
- B2B Spec to be made available mid January



2024 - CRR System Upgrade – Get Connected

- CRR meetings:

  - **Bi-weekly Technical User Group (TUG)** Tue 10 AM, alternates with RUG.
    - Meetings available on the CAISO calendar on www.caiso.com
    - Meeting details and presentation materials are available on the CAISO Developer site at www.developer.caiso.com , which requires an account to be setup for access

  - **CRR Customer Partnership Group**
    - **Next CPG meeting is Wed, 12/13 @ 10 AM**
    - Monthly
    - Meetings available on the CAISO calendar on www.caiso.com
    - Meeting details and presentation materials are available on www.caiso.com > Stay Informed > Meetings & Events > Customer Partnership Groups

2024 – FERC 881 – Managing Transmission Line Ratings

Project Information	Details/Date

High Level Project Scope	This initiative will address the California ISO's compliance with FERC Order No. 881 in establishing new transmission line rating requirements
	
	Order No. 881 establishes new transmission line rating requirements for public utility transmission providers
	• Establish and use ambient-adjusted ratings and seasonal ratings for all transmission lines unless excepted
	  • Use AARs for near-term transmission service requests
	  • Use seasonal rating for long-term transmission service requests
	• RTOs/ISOs must implement systems and procedures to allow transmission owners to electronically update transmission line ratings at least hourly
	• Use uniquely determined emergency ratings for contingency analysis in the operations horizon and in post-contingency simulations of constraints
	• Implement transparency reform

Milestone Type	Milestone Name	Dates	Status
Tariff	Draft Tariff Language	May 20, 2022	✓
	Revised Draft Tariff Language	Jun 23, 2022	✓
	FERC Filing ER22-2362	Jul 12, 2022	✓
	FERC Acceptance ER22-2362	Apr 20, 2023	✓
Production	Production	2024	

Spring 2026 Release

Day Ahead Market Enhancements

Project Information	Details/Date
High Level Business Problem or Need	In recent years, Variable Energy Resource (VER) have gained significant traction in the energy grid, playing a crucial role in achieving renewable energy targets and reducing greenhouse gas emissions. However, their increasing presence has introduced a new challenge energy imbalances between the Day Ahead and Real Time markets. Another reason for the energy imbalance is the day-ahead market operates on hourly time increments, whereas real-time market schedules energy in 15 and 5-minute intervals. This discrepancy in granularity results imbalances since the rea-l-time market schedules fluctuate within the hour while day-ahead market schedules remain fixed for the entire hour. These imbalances necessitates out-of-market interventions by operators, such as forecast biasing and dispatches, to uphold grid reliability. However, this situation presents an opportunity to improve our market software, enabling us to achieve a more efficient and economical solution while addressing the variability and reliability concerns within the market.
High Level Project Scope	Enhance the California ISO's (CAISO's) day-ahead market by: • Introducing an imbalance reserve (IRU/IRD) product to provide flexible capacity to account for real-time ramping needs • Enhancing the residual unit commitment process to also ensure there is sufficient downward dispatch capability (RCU/RCD) • Enhancing the day-ahead market to maximize benefits of greater West-wide diversity in the day-ahead optimization for Western Energy Imbalance Market participants
BPM Changes	Settlements and Billing, Market Instruments & Market Operations
Tariff Changes	Sections 27, 31, 34, 39
Impacted Systems	MF, SIBR, DAM, OASIS, CMRI, Settlements & Internal Systems

Day Ahead Market Enhancements

System	High Level Changes
MF	• Define IRU, IRD, RCU, RCD eligibility for the resource ID in MF.
SIBR	• IRU,IRD,RCU,RCD bid rules
DAM	• Calculate IRU/IRD requirements • MPM: Market Power Mitigation for IRU/IRD • IFM: procure IRU/IRD • IRU/IRD deployment scenarios • IRU/IRD requirement distribution • IRU/IRD in NA-AC power flow • Include IRU/IRD in constraints • RCU/RCD procurement • RUC-MPM pass • Impact on RUC performance with additional MPM pass • LMP for EN, IRU/IRD, RCU/RCD
OASIS	• IRU, IRC, RCU,RCD related public reports
CMRI	• IRU, IRC, RCU,RCD related private reports
Settlements	• IRU, IRC, RCU,RCD Settlements

Day Ahead Market Enhancements

Milestone Type	Milestone Name	Dates	Status
Board Approval	Board briefing/approval	May 17, 2023	✓
External BRS	Publish External BRS v1.0	Jul 25, 2023	✓
	Publish External BRS v1.1 • Clarify, correct typos and clean up the document. • Move some requirements from DAME BRS to EDAM BRS and vice versa. • Update business requirement to match filed Tariff and/or clarify policy.	Dec 22, 2023	
Settlements Config Guides	Post Draft Config Guides - First set of charge codes	Jan 16, 2024	
	Post Draft Config Guides - Second set of charge codes	Mar 26, 2024	
	Post Draft Config Guides - Third set of charge codes	Aug 26, 2024	
Tech Spec	Publish Technical Specifications - OASIS	Nov 09, 2023	✓
	Publish Technical Specifications – MF Publish MF GRDT v19.0 DRAFT	Nov 21, 2023	✓
	Publish Technical Specifications - SIBR	Nov 28, 2023	✓
	Publish Technical Specifications - CMRI	Dec 15, 2023	
Tariff	First Draft Tariff Posting	Jun 02, 2023	✓
	Second Draft Tariff Posting	Jul 11, 2023	✓
	FERC Filing	Aug 22, 2023	✓
	Receive FERC order	Dec 21, 2023	
BPMs	Post Draft BPM – Market Instruments	TBD	
	Post Draft BPM – Market Operations	TBD	
	Post Draft BPM – Settlements and Billing	TBD	
	Post Draft BPM – Definitions and Acronyms	TBD	
External Training	External User Training	May 08, 2025	
Market Sim	Market Sim Scenarios	Aug 04, 2023	✓
	Market Sim Window	Jun 02, 2025 - Aug 22, 2025	
Production Deployment	Day Ahead Market Enhancements (Inactive)	Oct 01, 2025	
Production Activation	Day Ahead Market Enhancements (Financially Binding	May 01, 2026	

Spring 2026 – Day Ahead Market Enhancements

- Upcoming BRS v1.1 to publish 12/22/23
- Revisions Preview:
  - Clarified, corrected typos and cleaned up the document.
  - Moved some requirements from DAME BRS to EDAM BRS and vice versa.
  - Updated business requirement to match filed Tariff and/or clarified policy.
    - Restored back Reliability Capacity Up/Down (RCU/RCD) bid caps to $250.
    - Set Metered Sub-System (MSS)-specific annual Reliability Unit Commitment (RUC) participation flag to always Opt-In.
    - Netted RCU/RCD Overlapping Resource Adequacy (RA) Capacity from RUC Bid Cost Recovery (BCR) calculations.
    - Updated for not assessing Resource Adequacy Availability Incentive Mechanism (RAAIM) to Imbalance Reserve (IR) and Reliability Capacity (RC) awards for generic and Flex RA.
    - Extended the Day-Ahead (DA) and Base Schedule Forecast Movement to virtual supply and demand resources.
    - Extended the Fifteen-Minute Market (FMM) deviation settlements to virtual supply and demand resources.
    - Accounted for virtual Forecast Movement (FM) in allocation of residual FM Settlements.
    - Made the Load-Serving Entity (LSE)-Resource Pair True-Up flag on LSE-Resource Pair instead of LSE-only and updated its logic and submission system from Master File to Customer Interface for Resource Adequacy (CIRA).
    - Set Upper Economic Limit (UEL) to 0 for System Resources, if e-tag validation fails.
    - Required that resources with RCU Award that submitted a DA Energy Bid to export outside the EDAM Area must provide a decremental Real-Time (RT) Energy Bid to dispatch down the export schedule in the FMM.
    - Updated for not mitigating RCU Bids that are submitted on behalf of imports from outside the EDAM Area.
    - Published Imbalance Reserve Up/Down (IRU/IRD) and RCU/RCD Overlapping RA Capacity in Customer Market Results Interface (CMRI) reports.
    - Changed calculation of ramp rate segment for IRU and IRD to correspond to Day-Ahead Energy Schedule (DAES) instead of DAES+IRU Award and DAES-IRD Award.
    - Removed the requirement of intertie congestion components being included in RCU/RCD marginal prices.
    - Updated Ancillary Service State of Charge (ASSOC) constraints formulation.
    - Accounted for IR Surplus in market optimization, Settlements and reporting.
    - Allowed bid daily min energy limit positive or negative in SIBR, consistent with market.
    - Expand IR Requirement input model to cover Trading Day+1, +2, and +3 for market and reporting.
    - Deleted the RC Constraint Open Access Same-time information System (OASIS) reports.

Extended Day Ahead Market (EDAM) Implementation

Project Information	Details/Date
High Level Business Problem or Need	The purpose of this initiative is to create a comprehensive extended day-ahead market that extends over multiple balancing authority areas (BAAs) participating in the Western Energy Imbalance Market (WEIM). EDAM is a voluntary day-ahead electricity market with the potential to deliver significant economic, environmental, and reliability benefits for participants across the West. EDAM will more efficiently and effectively integrate renewable resources and address the significant operational challenges presented by a rapidly changing resource mix, emerging technologies, and the impacts of climate change. EDAM will enable procurement of robust supply and flexible capacity that will position EDAM participants to effectively address changes in conditions from day-ahead to real-time, improving their response to potential reliability challenges. EDAM builds upon the proven ability of the WEIM to increase regional coordination, support state policy goals, and cost effectively meet demand.
High Level Project Scope	The EDAM design leverages existing features of the ISO day-ahead market that are common in other day-ahead markets across the country. The design also considers enhancements proposed in contemporaneous stakeholder initiatives that will harness flexibility across the larger footprint by incorporating an imbalance reserve product that will enhance price formation. EDAM introduces new products, imbalance reserve and reliability capacity, as well as new penalties, and a Resource Sufficiency Evaluation (RSE) surcharge.
BPM Changes	Definitions and Acronyms Energy Imbalance Market (EIM) Market Instruments Market Operations Settlements and Billing EDAM
Impacted Systems	MF, ALFS, ALFS-SOA, SIBR, RTSI, RTBS, BSAP, DAM (IFM and RUC), DA-RSE (new), RTM (RTPD and RTD), STUC, MPM, ITS, BARC, GHG Pass (new), Settlements, CMRI, OASIS, ADS, WebOMS, Internal ISO Systems
Requirements	Published Aug 02, 2023

Extended Day Ahead Market (EDAM) Implementation

Milestone Type	Milestone Name	Dates	Status
External BRS	Publish External BRS v1.0	Aug 02, 2023	✓
	Publish External BRS v1.1	Dec 29, 2023	
Tariff	Draft Tariff Language	Mar 30, 2023	✓
	Revised Draft Tariff Language	Jun 08, 2023	✓
	Updated Revised Draft Tariff Language	Jul 25, 2023	✓
	FERC Filing	Aug 22, 2023	✓
	FERC Response requested by	Dec 21, 2023	✓
	Requested effective date for tariff changes for EDAM agreements and onboarding provisions	Dec 21, 2023	
Settlements Config Guides	Post Draft Config Guides - First set of charge codes	Jan 16, 2024	
	Post Draft Config Guides - Second set of charge codes	Mar 26, 2024	
	Post Draft Config Guides - Third set of charge codes	Aug 26, 2024	
Tech Spec	Publish Technical Specifications – RTSI	12/6/23	✓
	Publish Technical Specifications – SIBR	12/15/23	
	Publish Technical Specifications – MF	Q1 2024	
	Publish MF GRDT DRAFT	Q1 2024	
	Publish Technical Specifications – OASIS	Q1 2024	
	Publish Technical Specifications – ALFS	Q1 2024	
	Publish Technical Specifications – CMRI	Q1 2024	
	Publish Technical Specifications – OMS	Q1 2024	
BPMs	Post Draft BPM – Energy Imbalance Market (EIM)	TBD	
	Post Draft BPM – Market Instruments		
	Post Draft BPM – Market Operations		
	Post Draft BPM – Settlements and Billing		
	Post Draft BPM – EDAM		
	Post Draft BPM – Definitions and Acronyms		
External Training	Training	TBD	
Market Sim	EDAM Onboarding Market Sim	Sep 01, 2025 – Jan 16, 2026	
Production	EDAM Production Deployment - Inactive	Oct 01, 2025	
	EDAM Onboarding (Financially Binding) & Activation	May 01, 2026	

Spring 2026 – EDAM ISO BAA Participation Rules Track A

Project Information	Details/Date
High Level Project Scope	Through this initiative, the ISO will address ISO Balancing Authority Area (BAA)-specific elements required for Extended Day-Ahead Market (EDAM) participation, including how to allocate ISO BAA EDAM resource sufficiency evaluation (RSE) failure surcharges and revenues, and options for curing ISO BAA EDAM advisory RSE shortfalls.
Tariff Changes	First, the CAISO proposes tariff revisions to allow for the settlement of all Transfer System Resources in the CAISO BA. Second, the CAISO proposes tariff revisions to allow for the settlement of EDAM Transfer revenue allocated to the CAISO BA, inclusive of EDAM Transfer revenue and EIM Transfer revenue. Third, the CAISO proposes tariff revisions to allow the CAISO to distribute all CAISO BA revenues and surcharges for the EDAM RSE Failure Surcharge. Fourth, the CAISO proposes tariff revisions to set forth the calculations for the EDAM Historical Revenue Recovery amounts for transmission owners in the CAISO BA. Fifth, the CAISO proposes tariff revisions to allow the CAISO BA to enable the Net EDAM Export Transfer Constraint, a voluntary, and optional, mechanism that each EDAM Balancing Authority may enable to preserve sufficient supply to meet its projected needs, while managing reliability based on conditions and circumstances anticipated within its balancing area.

Milestone Type	Milestone Name	Dates	Status
Board Approval	Board approval	Sep 21, 2023	✓
Tariff	Draft Tariff Language	Aug 25, 2023	✓
	Revised Draft Tariff Language	Oct 11, 2023	✓
	FERC Filing ER24-379	Nov 13, 2023	✓
	FERC Response Requested By	Feb 15, 2024	
Production	Effective Date	Spring 2026	

Spring 2026 – WEIM BHE Montana

Project Info	Details/Date
Application Software Changes	System modifications as needed to accommodate any unique Berkshire Hathaway Energy Montana needs to support their WEIM onboarding.
BPM Changes	WEIM BPM will be updated if needed to reflect changes identified during the onboarding and as required to reflect the unique processes of Berkshire Hathaway Energy Montana.
Market Simulation	December 2025 thru January 2026
Parallel Operations	February 2026 thru March 2026

Milestone Type	Milestone Name	Dates
Market Sim	Market Sim Window	Dec 2025 thru Jan 2026
Parallel Operations	Parallel Operations	Feb 2026 thru Mar 2026
Tariff	File Readiness Certification	Mar 2026
Production	Activation	May 2026

Stay Informed

Ways to participate in releases

- Visit the Release Planning page
  - http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

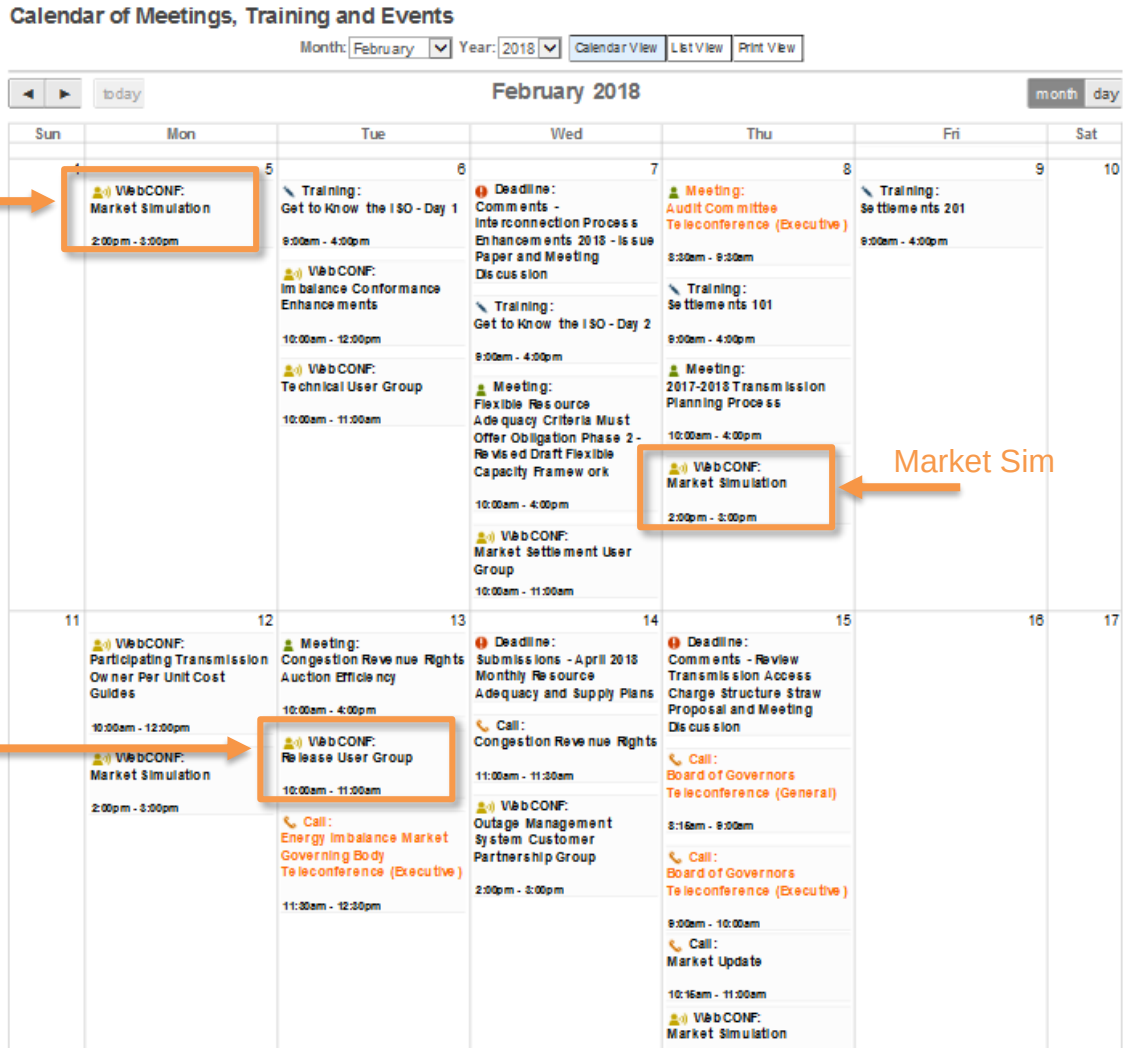
- Attend meetings
  - Release Users Group (RUG) bi-weekly meetings
    - Initiative status updates
    - System change updates on independent releases
  - Market Simulation calls
    - Visit the ISO calendar at www.caiso.com for meeting dates and times and add events to your calendar
    - Typically held on Mondays and Thursdays
  - Market Performance and Planning Forum
    - Bi-monthly review of market performance issues
    - High level discussion of release planning, implementation and new market enhancements

What to look for on the calendar…

Market Sim

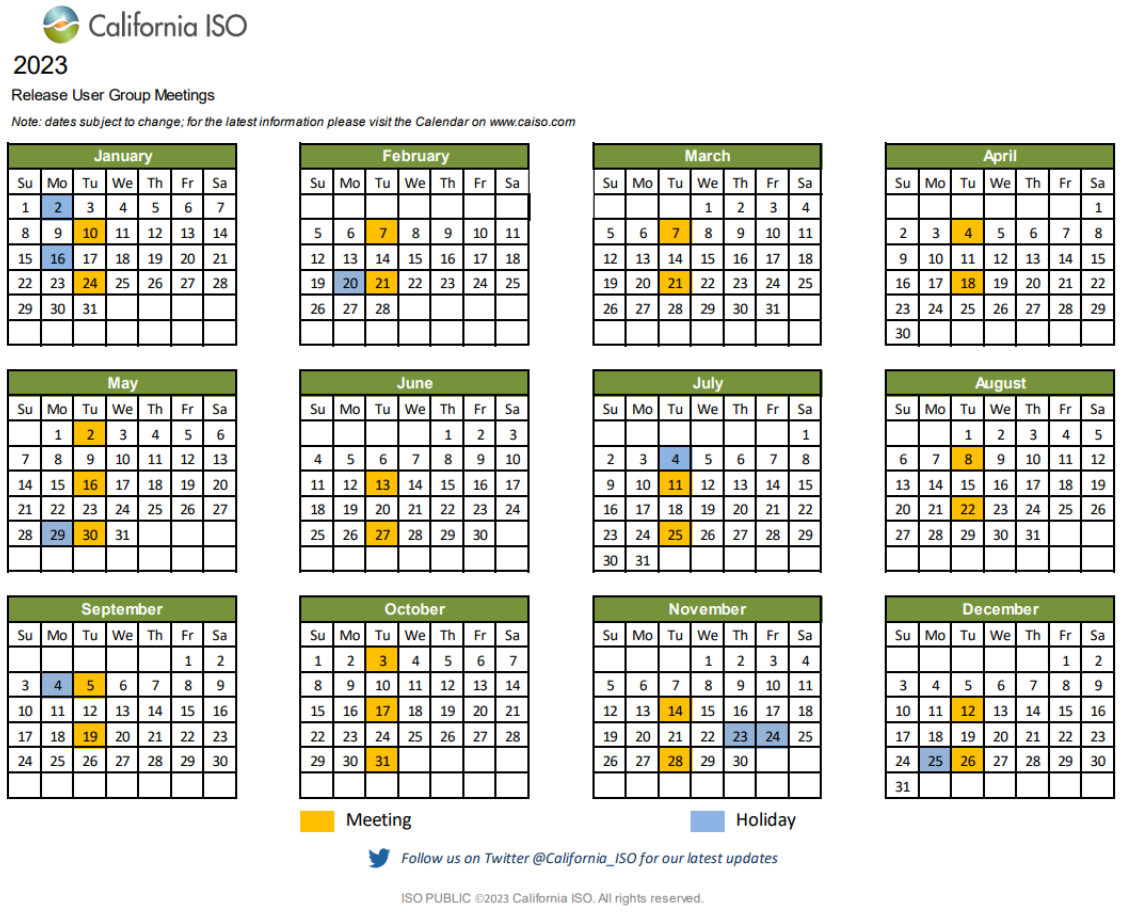
Release Users Group (RUG)

Market Sim



RUG Calendar 2023

RUG 12/26/23 cancellation; Next RUG 01/09/24



California ISO

2023

Release User Group Meetings

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

January

Su	Mo	Tu	We	Th	Fr	Sa
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

Su	Mo	Tu	We	Th	Fr	Sa
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

March

Su	Mo	Tu	We	Th	Fr	Sa
			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

Su	Mo	Tu	We	Th	Fr	Sa
						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

Su	Mo	Tu	We	Th	Fr	Sa
	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

Su	Mo	Tu	We	Th	Fr	Sa
				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

Su	Mo	Tu	We	Th	Fr	Sa
						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

Su	Mo	Tu	We	Th	Fr	Sa
		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

Su	Mo	Tu	We	Th	Fr	Sa
					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

Su	Mo	Tu	We	Th	Fr	Sa
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

Su	Mo	Tu	We	Th	Fr	Sa
			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

Su	Mo	Tu	We	Th	Fr	Sa
					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

Holiday

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RUG Calendar 2024

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				

CAISO Holiday

RUG Forum