



California ISO

# Technology User Group (TUG)

January 21, 2020

10:00 – 11:00 AM Pacific

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# TUG Agenda

Web Conference Information		Conference Call Information	
<i>URL</i>	<a href="https://caiso.webex.com/meet/CAISO-TUG">https://caiso.webex.com/meet/CAISO-TUG</a>	<i>Domestic Call-In</i>	(866) 528-2256
<i>Meeting Number</i>	966 010 353	<i>International Call-In</i>	(216) 706-7052
<i>Access Code</i>	389 588 9	<i>Access Code</i>	389 588 9

  

Topic	Facilitator
Agenda and Roll Call	Indu Nambiar
System Interface Changes	Trang Deluca
MRI-S AUP Update	Justin Wong
OMS – Discovery Date	Sandhya Balasubramanian
CMRI – Release Notes Update	Neela Alla
Browser Compatibility for UI	Doug Walker
CAISO’s B2B Integration Improvements Vision	Ajay Mannepalli
Ongoing Initiatives	Indu Nambiar

# System Interface Changes

## SIBR/BSAP

System	Project	Change Type	API Service Name & Major Version, Artifacts	MAP Stage	Production Activation	Technical Specifications
SIBR	CCDEBE1	Modify	<a href="#">RetrieveCleanBidSet_SIBRv5</a> <a href="#">RetrieveCleanBidSet_SIBRv5_DocAttach</a>	Oct 16, 2019	2020	<a href="#">13.2</a>
SIBR	CCDEBE1	Modify	<a href="#">RetrieveCurrentBidResults_SIBRv5</a> <a href="#">RetrieveCurrentBidResults_SIBRv5_DocAttach</a>	Oct 16, 2019	2020	<a href="#">13.2</a>
SIBR	CCDEBE1	Modify	<a href="#">SubmitRawBidSet_SIBRv5</a> <a href="#">SubmitRawBidSet_SIBRv5_DocAttach</a>	Oct 16, 2019	2020	<a href="#">13.2</a>
BSAP	EIM2019	Modify	<a href="#">RetrieveBalancingTestResults_BSAPv2</a> <a href="#">RetrieveBalancingTestResults_BSAPv2_DocAttach</a>	Oct 16, 2019	2020	<a href="#">1.7.3</a>

## CMRI

Project	Change Type	UI Change	API Service Name & Major Version, Artifacts	MAP Stage	Production Activation	Technical Specifications
LMPME CCDEBE1	Modify	Tab: Default Bids Existing Report: Default Energy Bid Curves	<a href="#">RetrieveDefaultBidCurves_CMRIv2</a> <a href="#">RetrieveDefaultBidCurves_CMRIv2_DocAttach</a>	LMPME - Sep 12, 2019 CCDEBE Nov 6, 2019	LMPME - Nov 13, 2019 CCDEBE - 2020	<a href="#">3.9.3</a>
CCDEBE1	Modify	Tab: Default Bids Existing Report: Default Commitment Costs	<a href="#">RetrieveExternalDefaultCommitmentCost_CMRIv1</a> <a href="#">RetrieveExternalDefaultCommitmentCost_CMRIv1_DocAttach</a>	Nov 11, 2019	2020	<a href="#">3.9.3</a>

# System Interface Changes

## MRI-S

Project	Change Type	UI Change	API Service Name & Major Version, Artifacts	MAP Stage	Production Activation	Technical Specifications
MRI-S API AUP	AUP	N/A	Retrieve Services: RetrieveMeterData_STLMTv1_AP RetrieveMeterData_STLMTv1_DocAttach_AP	12/10/2019	TBD	<a href="#">2.3</a>

## OASIS

Project	Change Type	UI Change	API Service Name & Major Version, Artifacts	MAP Stage	Production Activation	Technical Specifications
CRR Data Transparency Enhancements	Modify	Modify Congestion Revenue Rights > CRR Aggregated Revenue Adjustment Data	CRR_AGG_REV_ADJ  Add 4 new columns: DIRECTION IFM_NET_FLOW_MW CLAWBACK_REV CIR_SCH_REV	Feb 2020	Mar 2020	<a href="#">5.1.11</a>

## DRRS

Project	Change Type	UI Change	API Service Name & Major Version, Artifacts	MAP Stage	Production Activation	Technical Specifications
N/A – Incremental Data Retrieve	New	TBD	TBD	TBD	TBD	TBD

# MRI-S API Acceptable Use Policy

- In order to ensure system stability and performance, ISO is planning to implement AUP for the MRI-S application API:
  - Impacts only retrieve meter data service
  - It **does not** impact retrieve batch validation and submit meter data services.
  - Allows a user to retrieve meter data service request once every 30 seconds.
  - Participants can submit/retrieve other service requests within the same time period (*i.e. 30 seconds*)
  - The user will receive the following error message if the same service is submitted or retrieved within 30 seconds:
    - *“CAISO MRI-S Acceptable Use Policy Violation. Please retry your request again in 30 seconds from now. Note: Time resets each time you request before expiration.”*
  - Technical Specification document is updated with this information.
  - **Based on market participant feedback, the ISO has delayed the deployment until 26 February 2020.**

# OMS – Discovery Date

- Discovery Date logic
  - UI Changes
    - Currently discovery date can be entered by the user on the UI but shows the outage creation date as a default for both Generation/Transmission Outages.
    - If the user does not change the default on the UI, the discovery date is populated with the outage creation date
    - The ISO is proposing to change the UI such that the discovery date will not have any default and the date can be entered by the outage creator. If no date is provided, the field will be null and will no longer be populated with the outage creation date
  - API change
    - Currently on the API, it is an optional field. If the market participant does not provide a date, it defaults to outage creation date
    - The ISO is proposing to remove the defaulting logic such that the discovery date will be null if the user does not submit the date
    - Discovery date is an optional field in the following web services:
      - SubmitTransmissionOutage\_OMSv3\_AP
      - SubmitTransmissionOutage\_OMSv3\_DocAttach\_AP
      - SubmitResourceOutage\_OMSv3\_AP
      - SubmitResourceOutage\_OMSv3\_DocAttach\_AP

# CMRI Upcoming Release for CCDEBE and RC West

Please refer to release notes posted on [developer.caiso.com](http://developer.caiso.com)

## CMRI Customer Market Results Interface

HOME / APPS / CMRI

### Overview

CMRI is a reporting interface that contains private market information resulting from the ISO and EIM market processes: MPM, IFM, RUC, HASP, and Real-Time. This includes schedules and awards, resource-specific prices, default and mitigated bids, unit commitments, instructions, EIM base schedules, and EIM test results.

#### Resources

- [CMRI documentation](#)
- [CMRI UI screenshot](#)
- [HTTP Error Codes](#)
- [Connectivity Test](#)

[View UI Environments](#)

### Release Notes

NAME	STATUS	RELEASE	LAST UPDATED
CMRI 7.1.x Release Notes v1.0 (Fall 2019 Release).pdf	UPCOMING	Fall 2019	1/16/2020

### Tech Specs

# CRR Revenue Adjustments report to be removed from CMRI

## Background:

- January 2019 – deployed CRR Revenue Adjustments report
- March 2019 – deployed CRR Revenue Adjustments Details report
  - The Details report contains all the data the Summarized report and is provided for each CRR at a unique source and sink location
  - The Details report has data back to January 2019

CAISO will remove CRR Revenue Adjustments report effective with the 2019 Fall Release activation

- CMRI tech specs were updated 7/19/2019
- BPM update has been made
- **The API for this report has been disabled. The report on the UI will be removed along with Fall Release CMRI Software Deployment 2.**

# Browser Standards

CAISO will be transitioning to Chrome and Microsoft Edge as the supported browser standard.

- Internet Explorer 11
  - Current CAISO standard. Deprecated by Microsoft. Lifecycle is tied to Windows 10 release.
- Chrome
  - Advanced functionality and speed
  - Not tied to Microsoft
- Microsoft Edge – Chromium build
  - Released Jan 15<sup>th</sup>
  - Advanced capabilities in line with Chrome
  - Maintains Windows specific integrations and Microsoft support

Transition date pending feedback

# CAISO B2B Improvements

- Effort underway to enhance the developer experience working with CAISO Web API's
- POC will be kicked off in Q1 2020 and CAISO is soliciting participants/integrators who are interested to collaborate on these improvements
- Proposed improvements
  - Follow current best practices for RESTful Web API's
  - Offer B2B request response services in REST/JSON using OpenAPI 3.0 specification
  - WSDL/XSD's will be replaced with OpenAPI 3 contract specifications
  - API security will be using SSL client certificates (and potentially API keys) but there will not be any message level security or signing
  - Mock services will be released along with the specification for earlier development and integration
  - Postman collections and/or SOAPUI projects will be published along with the OpenAPI specs for help with testing and validating against the mock or deployed API's
  - OpenAPI tooling will be used to generate client stub code, SDK's and uploaded to CAISO Git
  - Examples and sample request/responses will be part of the OpenAPI specification files

# CAISO B2B Improvements (continued)

- Proposed improvements
  - Discussion forum functionality is being added to developer.caiso.com soon
  - Externally accessible Git repository is being added to developer.caiso.com in Q1 2020
  - This Git repository with change history will be used for all developer artifacts. Participants/integrators can request write access and submit pull requests for updates to samples, SDK, etc.
  - Developer.caiso.com forums will be used for collaboration during POC along with periodic calls and workshops
  - Responses will be compressed over the wire based on the client encoding option
  - B2B transition plan from SOAP/XML to REST/JSON for new services will be published later this year after POC completion

# Ongoing Initiatives

# Standardization of time format for data submissions & data requests

- ISO is implementing the use of standard date time format for all B2B data submissions
- Current formats that are accepted:
  - 2019-07-10T00:00:00-07:00 – offset of 7 hours based on Pacific Daylight Time
  - 2019-01-20T00:00:00-08:00 – offset of 8 hours based on Pacific Standard Time
  - 2019-01-20T08:00:00-00:00 – Timestamp in GMT/UTC
  - 2019-07-10T07:00:00Z – Timestamp in GMT/UTC
- Future acceptable formats (to match the response from ISO):
  - 2019-04-20T07:00:00-00:00 – Timestamp in GMT/UTC
  - 2019-04-20T07:00:00Z – Timestamp in GMT/UTC
  - OR
  - 2019-12-20T08:00:00-00:00 – Timestamp in GMT/UTC
  - 2019-12-20T08:00:00Z – Timestamp in GMT/UTC
- Implementation Plan
  - Technical Specifications Updated with accepted format - Fall 2019 Release
  - Enforcement of new format – **Not currently planned**

# Next TUG: Feb 04, 2020

Contact for Questions & Agenda Requests: Indu Nambiar, [inambiar@caiso.com](mailto:inambiar@caiso.com)

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