

Technology User Group (TUG)

July 23, 2019

10:00 - 11:00 AM Pacific

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TUG Agenda

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

Topic	Facilitator
Agenda and Roll Call	Trang Deluca
System Interface Changes	Trang Deluca
OASIS Production Update	Raeann Quadro
DRS Decommission	Trang Deluca
CMRI CRR Revenue Adjustments report	Raeann Quadro
Ongoing Initiatives	Trang Deluca



System Interface Changes: MF

Release	Project	Change Type	API Service Name & Major Version, Artifacts	Minor Version	RDT	MAP Stage	Production Activation	Technical Specifications
Fall 2019	ESDER3A LMPME CCE3	Modify	RetrieveGeneratorRDT_MFRDv4 RetrieveGeneratorRDT_MFRDv4_DocAttach	20191001		Sep 3, 2019	Nov 13, 2019	<u>5.1</u>
Fall 2019	ESDER3A LMPME	Modify	SubmitGeneratorRDT_MFRDv4 SubmitGeneratorRDT_MFRDv4_DocAttach	20191001	GRDT v13.0	Sep 3, 2019	Nov 13, 2019	<u>5.1</u>



System Interface Changes: SIBR, BSAP

System	Release	Project	Change Type	API Service Name & Major Version, Artifacts	MAP Stage	Production Activation	Technical Specifications
SIBR	Fall 2019	CCDEBE1	Modify	RetrieveCleanBidSet_SIBRv5_DocAttach	Sep 3, 2019	Nov 13, 2019	<u>v13.1</u>
SIBR	Fall 2019	CCDEBE1	Modify	RetrieveCurrentBidResults SIBRv5 DocAttach	Sep 3, 2019	Nov 13, 2019	<u>v13.1</u>
SIBR	Fall 2019	CCDEBE1	Modify	SubmitRawBidSet_SIBRv5_DocAttach	Sep 3, 2019	Nov 13, 2019	<u>v13.1</u>
BSAP	Fall 2019	EIM 2019	Modify	RetrieveBalancingTestResults BSAPv2 RetrieveBalancingTestResults BSAPv2 DocAttach	Sep 3, 2019	Nov 13, 2019	1.7



System Interface Changes: CMRI

Release	Project	Change Type	Customer Impact	UI Change	API Service Name & Major Version, Artifacts	MAP Stage	Production Activation	Technical Specifications
Fall 2019	CCDEBE1	Modify	CAISO Market	Tab: Default Bids Existing Report: Default Energy Bid Curves	RetrieveDefaultBidCurves_CMRIv2_DocAttach	Sep 3, 2019	Nov 13, 2019	<u>3.9.1</u>
Fall 2019	LMPME	Modify	CAISO Market	Tab: Default Bids Existing Report: Default Commitment Costs	RetrieveExternalDefaultCommitmentCost CMRIv1 RetrieveExternalDefaultCommitmentCost CMRIv1 DocAtt ach	Sep 3, 2019	Nov 13, 2019	<u>3.9.1</u>
Fall 2019	EIM 2019	New	EIM	Tab: Energy Imbalance Market New Report: Resource Operating Limits	RetrieveEIMResourceOperatingLimit_CMRIv1_DocAttach	Sep 3, 2019	Nov 13, 2019	<u>3.9.1</u>
Fall 2019	EIM 2019	New	CAISO Market	Tab: Real-Time New Report: Resource Operating Limits	RetrieveResourceOperatingLimit_CMRIv1 RetrieveResourceOperatingLimit_CMRIv1_DocAttach	Sep 3, 2019	Nov 13, 2019	<u>3.9.1</u>



System Interface Changes: OASIS

Release	Project	Change Type	Customer Impact	UI Change	API Service Name & Major Version, Artifacts	MAP Stage	Production Activation	Technical Specifications
Fall 2019	EIM 2019	New		Tab: ENERGY New Report: Transmission Loss	TBD	Sep 3, 2019	Nov 13, 2019	5.1.9



Page 7

System Interface Changes: STLMT

System	Release	Project	Change Type	API Service Name & Major Version	MAP Stage	Production Activation	Technical Specifications	Artifacts
STLMT	2019	RCSI	New	SubmitNetEnergyData_STLMTv1 SubmitNetEnergyData_STLMTv1_DocAttach *For RC Customers outside of the CAISO BA to submit Net Energy for Load and Net Generation	Jul 8, 2019	TBD	1.0	1.0



OASIS Production Data Retrieval Issues

Functional variance for Groupzip files starting 2/19/2019 that resulted in market participants being unable to retrieve complete price information.

- Issues encountered:
 - Issues for trade dates 5/25 and going forward Resolved
 - T-15 API call issue Resolved.
 - 10 minute issue Resolved.
- If this message is returned: "<m:ERR_DESC> GroupZip DownLoad is in Processing, Please Submit request after Sometime</m:ERR_DESC>", the API file generation process has initiated, and the users must retry the request to retrieve the completely generated file at a later time. This is functionality as designed.

Functionality related to the above items is restored. CAISO is completing analysis related to a small number of unique CIDI tickets. This topic will be closed from next meeting and will be addressed thru Tickets, if needed. This slide will be removed from next meeting.



SIBR MSG Transition Set API function

API receipt for SIBR bids for MSG resources containing Transition Set data has been streamlined. (No change to xsd)

- SIBR patch was applied on 6/25 to production (effective for 6/27 DAM and any RTM submitted after deployment.)
- An MSG Transition Set must contain all desired Path data and is expected to be defined for the resource on the bid.
- Ensure all configurations are complete when submitting a Transition set for a resource.
 - If each configuration submits a different Transition Path only the first processed will exist on the bid.
 - To ensure the Transition Path is defined, all submitted configuration should contain the same defined paths.
 - If no Transition Path is defined, SIBR will insert the registered Path from Master File.
 - Example:
 - Resource X has 3 configurations 1X1, 2X1 and 3X1.
 - » 1X1 configuration submits Path data for 1X1 to 2X1
 - » 2X1 configuration submits no Path data
 - » 3X1 submits 2X1 to 3X1
 - Assuming the 1X1 is parsed first only the 1X1 to 2X1 Transition data will exist on the bid.
 - Assuming the 3X1 is parsed first only the 2X1 to 3X1 Transition data will exist on the bid.



Demand Response System (DRS) – Decommissioning July 31, 2019

ESDER2 fall release 2018 project activation + 9 month transition period = DRS access/data availability ends on July 31, 2019

- Applications: User-Interface, APIs
- Environments: Market Simulation, Production

ACTION ITEM:

Market participants must download all production DRS application (historic location, registration, meter) data from the user-interface or available APIs prior to July 31, 2019, as this data will no longer be accessible for retrieval after this date.

Going forward, production submission & retrieval of demand response:

- Location and registration information will continue in the existing Demand Response Registration System (DRRS)
- Measurement information will continue in the existing MRI-Settlements system

Communication: Bronto message sent to all DRS & DRRS users

User-Interface

Production: https://portal.caiso.com/sbm

Market Simulation: https://portalmap.caiso.com/sbm

API Services

Aggregated Proxy Demand Resource Load, Generation and Compliance

RetrievePDRAggregatedData_DRSv20100301_AP

Proxy Demand Resource Load and Generation Reduction

- RetrievePDRMeterData DRS AP
- RetrievePDRMeterData_DRSv20100301_AP
- RetrievePDRMeterData_DRSv20100301_DocAttach_AP
 ISO Public



CRR Revenue Adjustments report to be removed from CMRI

Background:

- January 2019 deployed <u>CRR Revenue Adjustments report</u>
- March 2019 deployed <u>CRR Revenue Adjustments Details report</u>
 - 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
- BPMs update is forthcoming



Ongoing Initiatives



Fall 2019 - Technical Specification Updates

The technical specification updates for all applications that are impacted for Fall 2019 are detailed in the agenda for the TUG call on May 28, 2019 and can be found at:

http://www.caiso.com/Documents/Agenda-TechnicalUserGroupWebConferenceMay282019.pdf



Revised Technical Specification Template

CAISO Technical Specification template changes

- Standardization
- Efficient
- Lean

Proposed changes include:

- Document release notes with service level change details
- Sample XMLs posted outside the document
- Simplified element table to remove redundant information
- Section for service specific use model
- Consolidated list of service artifacts for supported versions

Revised template is available at:

http://www.caiso.com/Documents/TechnicalSpecification-Template-TechnicalUserGroup.pdf



CMRI Improvements

CAISO is planning CMRI UI Upgrade & Performance Improvements

- Performance Improvements
 - Technology/Infrastructure Upgrade
 - Data Model Normalization
 - Data migration needed due to data model normalization for schedules and schedule prices
 - Data migration process has been verified in Non-Production environment. Current Plan:
 - » Complete the data migration and cut over to new UI and performance improvements.
 - » After cutover, users will have access to all the data.
 - » ISO will communicate CMRI performance improvements patch deployment time line.
- Market Participant Testing prior to Production deployment.
 - UI is available for testing in MAP Stage environment as of June 6, 2019
 - API is available for testing in MAP Stage environment as of June 26 2019
- NO API interface changes and NO functionality changes.
- CAISO requests to use the latest supported version as mentioned in the Tech Specs for application programming interfaces (API)
- Please refer to latest tech specs on https://developer.caiso.com

CMRI UI changes that are expected as part of this effort were presented in the TUG call on May 14, 2019 and can be found at: http://www.caiso.com/Documents/Agenda-TechnicalUserGroupWebConference-May14_2019.pdf



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 Fall 2020 Release



Next TUG: August 6, 2019

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