Congestion Revenue Rights (CRR) Upgrade Project - Customer Partnership Group

Monthly Call – Nov 30, 2022

Congestion Revenue Rights Team

Jeremy Malekos

jmalekos@caiso.com

Manager Market Settlement Production

Instructions for raising your hand to ask a question

- If you are connected to audio through your computer or used the "call me" option, select the raise hand icon located on the top right above the chat window. Note: #2 only works if you dialed into the meeting.
  - Please remember to state your name and affiliation before making your comment.
  - You may also send your questions via chat to Brenda Corona or to all panelists.

Agenda

Time	Topic
10:00 – 10:05	Welcome
10:05 – 10:15	CRR Upgrade Project – Update / Overview
10:15 – 10:25	CRR Upgrade project – Get connected
10:25 – 10:55	CAISO B2B Improvements – Goals & Current Status
10:55 – 11:00	Next Steps

California ISO

CRR Upgrade Project - Overview

- The ISO has decided to upgrade the existing CRR system with a new system that adopts the latest technology stack aligned with the ISO's technology standards, consolidates all CRR related functions, minimizes human errors, reduces processing time, eliminates manual workarounds, and positions the system to accommodate policy changes down the road.

- This on-going Customer Partnership Group (CPG) will provide an overview of the schedule, review of external BRS and answer questions. Subsequent meetings will include detailed review and discussion of business process changes impacting market participants.

- http://www.caiso.com/Documents/BusinessRequirementsSpecification_CongestionRightsRevenueUpgrade.pdf

- The goal of this CPG is to ensure customer readiness as this project deploys to Production in 2024.

Timeline

ISO PUBLIC

CRR Upgrade Project– Updates

Updates

- Updated BRS with phase 1 and phase 2 denoted – 11/16/2022
- B2B specifications final draft – 12/23/2022
- Draft Deployment plan – 12/23/2022

California ISO

CRR Upgrade Project– Overview of changes

- Load submission process
  - At the time of load submission participant will be notified of any failed validation per sink location based on the exceedance load and allow to resubmit
- OBAALSE process
  - EQ load election will be submitted through the UI during the OBAALSE load submission

- Consolidate data publishing in MUI and/or OASIS

  - Calendar: change from webpost to OASIS

  - Model data: change from webpost to MUI, including both NDA and non NDA files

  - Market Result data: from webpost to MUI

- Modeling data

  - Powerflow case to be released in PSSE v30

  - ITC definition will be modeled as source and sink

- Features added to enable user performing additional tasks

  - MT_TOR: user to submit through UI, currently performed by CRR group

- Changes to Load Migration and Source and Sink processes

- User access

  - User will be provisioned to specific functions within the system, based on the application access request approval process

- Webservices interface for interacting with MUI

CRR Upgrade Project– Overview of changes Cont.

- Source and Sink list release
  - Remove the existing 30 days ahead of allocation version
  - Will be released in v0, v1 and other updates within the active market period
- Retired resource mapping
  - Re-map the retired PNode to the closest electrically connected PNode that is also a biddable location in the CRR processes and has the same source/sink designation as the retired location
  - Baseloading CRR will be mapped based on the model used in the active market period to capture the most accurate topology
  - Mapping will be released for the corresponding market period
- Source and Sink islanded by outage
  - With baseloading CRR, sell offer allowed
  - No baseloading CRR, will not be biddable for the effective market

CRR Upgrade Project – Phase 2 BRQ

- BRQ00220 - The CRR system publishing of the calendar to OASIS shall be automatic. Published once per year and ability to edit before publication.
- BRQ03630 - Broadcast set aside value to OASIS
- BRQ05262 - Broadcast credit margin report to OASIS
- BRQ05264 - Broadcast 3 year historical expected value to OASIS
- BRQ05786 - Broadcast Retired Resource Name Change Mapping to OASIS
- BRQ06770 - Broadcast Binding Constraints to OASIS
- BRQ06871 - Broadcast CRR source and sink list to OASIS

Note: BRS update on 11/18/2022

California ISO

Next Steps

- Next meeting is Dec 21, 2022

- Visit CPG webpage for more information:
  http://www.caiso.com/informed/Pages/MeetingsEvents/CustomerPartnershipGroups/Default.aspx

California ISO

CAISO B2B Improvements – Goals & Current Status

- **Goals**
  - Enhance the developer experience working with CAISO Web API's
  - Provide API's in REST/JSON using OpenAPI 3.0 specification
  - Provide examples, mock services and tooling to generate client/server stubs and SDK
  - Provide tests for the API's using Postman collections
  - Collaboration using Git and forums on developer.caiso.com
  - Simplify authentication using mutual TLS and X.509 certificates

- **Update**
  - POC updates and notes and recording from meetings are posted on developer forum at https://developer.caiso.com/forum/topics.aspx?ForumID=4.
  - Documents uploaded to the Developer Forum: https://developer.caiso.com/forum/messages.aspx?TopicID=6119
    - PowerPoint presentation and webinar recording
    - Draft version of CRR Auction Service OpenAPI Specifications
    - Draft version of CRR business validate message bundle

CAISO B2B Improvements – File Naming Convention

A2A/B2B OpenAPI File Naming Conventions for versioning:

File name example: **caiso_crr_market_info_v1.0.0_openapi.yaml**

Version Numbering Format: **MARJOR.MINOR.MINI**

MAJOR version of the file name will be incremented if there are any new services added or any major version update to any of the existing services

MINOR version of the file name will be incremented if there any minor version update to any of the existing services

MINI version of the file name will be incremented if there are only documentation changes/corrections, with no service changes.

CAISO B2B Improvements

Each version update of the file name will reset the version numbers on the right

Version numbers will be tracked into the YAML file as part of the Release Notes

Example:
v1.0.0   File is published to market participants
v1.0.1   Edits were made to documentations, no functional changes
v1.0.2   Edits were made to documentations, no functional changes
v1.0.3   Edits were made to documentations, no functional changes
v1.1.0   Added a Minor version for a service
v1.1.1   Edits were made to documentations, no functional changes
v1.2.0   Added a Minor version for a service
v1.3.0   Added a Minor version for a service
v2.0.0   Added a Major version for a service
v2.0.1   Edits were made to documentations, no functional changes
v3.0.0   Added a new service

California ISO

CAISO B2B Improvements – New Web Services for CRR

Service	Operation
Allocation Nomination Portfolio	POST/GET
Auction Bid Portfolio	POST/GET
Historical and Forecasted Load	POST/GET
Existing CRRs (CRR Market Data)	GET
Market Data (CRR Market Data)	GET
Market Results (CRR Market Data)	GET
Private Allocation Results (CRR Market Data)	GET
Private Auction Results (CRR Market Data)	GET
Load Migration Data	POST/GET
Market Status (Market Info)	GET
CRR Messages	GET
Secondary Market	POST/GET
TOR Conversion	POST/GET

California ISO