



California ISO

CMRI & OASIS Customer Partnership Group

April 2020

*Prince Philip & Swami Mahalingam
IT Product Management*

Customer Partnership Group

Scope and Objective

- Created in response to customer's request to have more involvement in the planning, design and usability validation phases of ISO application development
- Provide an open interactive partnership forum to identify potential opportunities to improve the overall customer experience
- Share ideas, opinions and provide feedback
- Discuss issues and concerns, and answer customer questions
- All ideas are welcome and will be considered based upon feasibility, prioritization and timeline constraints. Not all ideas may be feasible to implement
- Meetings vary in frequency to review progress, provide feedback on design and usability and discuss implementation approaches
- Active participation is critical to the CPG success and to improve our customer's experience interacting with ISO applications

Agenda

- Introduction
- Process Improvements
 - Release Notes
 - Knowledge Articles
- Upcoming Changes
 - Variances
 - Lessons learned from 2019
 - Version Management
- Open Discussion

Process Improvements

CMRI Release Notes

- The latest release notes provides details on patches related to:
 - Commitment Costs and Default Energy Bids Enhancements (CCDEBE)
 - Reliability Coordinator (RC) West
- Path to latest release notes on developer site:
 - Go to developer site
 - Click on CMRI under Apps
 - Navigate to Release Notes

This is an example of latest release notes describing issues that were addressed as part of a patch. As part of process improvement, we will publish release notes as we deploy patches into production that addresses any open defects

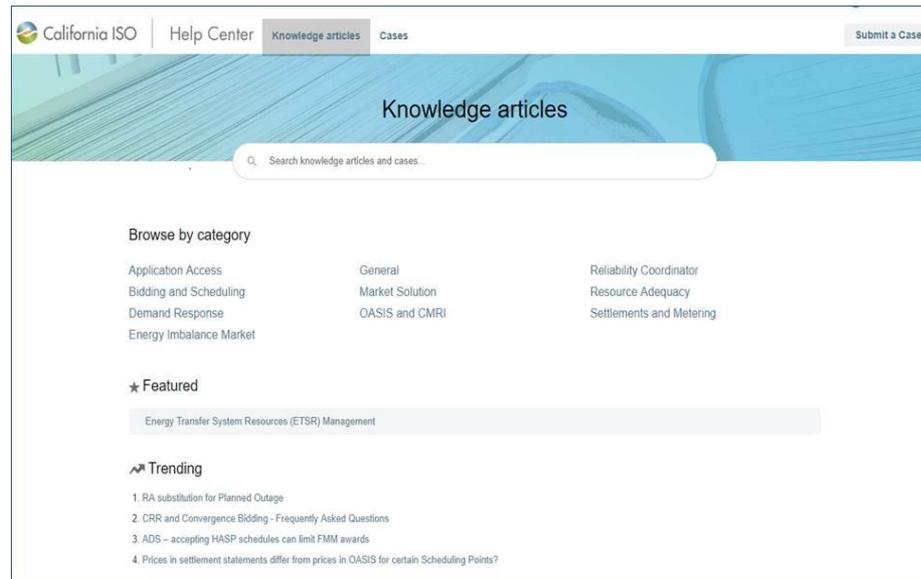
OASIS Release Notes

- The latest release notes provides details on the patches related to:
 - **Flex Ramp Surplus Demand Curve:** Fix to address Flex Ramp Surplus Demand Curve, returning data for any date irrespective of the date in the filter
 - **Flexible Ramp Aggregate Awards:** Fix to address Flexible Ramp Aggregate Awards returning data for any date irrespective of the date in the filter
 - **Flexible Ramping Constraint Results:** Fix to address the data consistency.
 - CIDI Ticket ref#: 218587
- Path to latest release notes on developer site:
 - Go to developer site
 - Click on OASIS under Apps
 - Navigate to Release Notes

This is an example of latest release notes describing issues that were addressed as part of a patch. As part of process improvement, we will publish release notes as we deploy patches into production that addresses any open defects

Knowledge Articles

- Knowledge Articles are now available in CIDI
 - Mini FAQs or brief explanation on certain functions
 - SCs may contact your Customer Rep to get access to CIDI



The screenshot shows the 'Knowledge articles' page on the California ISO website. The page has a blue header with the California ISO logo, 'Help Center', 'Knowledge articles', and 'Cases' tabs. A 'Submit a Case' button is in the top right. Below the header is a search bar with the text 'Search knowledge articles and cases...'. The main content area is divided into three sections: 'Browse by category', '★ Featured', and '↗ Trending'. The 'Browse by category' section lists: Application Access, Bidding and Scheduling, Demand Response, Energy Imbalance Market, General, Market Solution, OASIS and CMRI, Reliability Coordinator, Resource Adequacy, and Settlements and Metering. The '★ Featured' section has a single article: 'Energy Transfer System Resources (ETSR) Management'. The '↗ Trending' section lists four articles: '1. RA substitution for Planned Outage', '2. CRR and Convergence Bidding - Frequently Asked Questions', '3. ADS - accepting HASP schedules can limit FMM awards', and '4. Prices in settlement statements differ from prices in OASIS for certain Scheduling Points?'

Knowledge Articles

- Knowledge Articles are now available in CIDI
 - Example for discussion purposes Only

Load Settlement Price Report

Nov 21, 2018 · Knowledge

QUESTION

The Load Settlement Price Report has not been updated with the latest data on the CAISO page, why?

SOLUTION

As part of the 2017 Fall release, the ISO has stopped posting data to the Load Settlement Price reports effective 04/03/18. These reports are located on the ISO website under Stay Informed / Bulletins, Reports and Studies / Market Performance Reports / Load Settlement Price Reports.

Link: <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=208D5210-7498-402B-A1EE-74C455442A36>

Effective 04/04/18, the data is now included in a new OASIS report under PRICES >> Hourly RTM LAP Prices.

ATTACHMENTS

Was this article helpful? 👍 0 👎 0

RELATED ARTICLES

Why does the ELAP LMP in my settlement statement not match what I see in OASIS? 👁 57

Scheduling Point/Tie Combination Locational Marginal Prices report 👁 45

Gas Price Index Scaling Factors 👁 17

Fuel Price Region Definitions 👁 24

How is a participant notified when prices are posted on OASIS? 👁 26

Examples of OASIS & CMRI Knowledge Articles

- How is a participant notified when prices are posted on OASIS?
- When will the missing prices in Open Access Same-time Information System (OASIS) and/or Customer Market Results Interface (CMRI) be published?
- Missing CAISO Demand Forecast data for Real-Time Market
- Reports in CMRI and OASIS contain no data after a certain trade date
- OASIS RUC LMPs not published for all locations
- Data retention period(s) for OASIS, CMRI, and ADS
- Prices in settlement statements differ from prices in OASIS for certain Scheduling Points?

Upcoming Changes

CMRI & OASIS Variances - April

- The upcoming release notes should highlight the defects that are fixed and deployed in production for both OASIS and CMRI
- The list below shows the current count of known variances in CMRI and OASIS
- Definition of Severity
 - Urgent - Data Loss/Critical Error
 - Very High - Loss of functionality without work around
 - High – Loss of functionality with work around
 - Medium – Partial Loss of feature set
 - Low – Cosmetic or documentation error

System	Severity	# Defects
CMRI	High	3
	Medium	2
	Low	2
OASIS	High	2
	Medium	2
	Low	1

OASIS – Lessons learned in 2019

- Background
 - Major stack Upgrade in Q1 2019 for performance and technology needs
 - No Market Simulation executed
 - Large number of CIDI cases related to few root-cause
 - Corrupted and Empty files created in high load conditions
 - OASIS has un-named user community currently which limits the ability to proactively inform customers of missing intervals

OASIS – Lessons learned in 2019

- Background
 - ISO’s standard policy is to support two versions of services as described in the Technical Specifications
 - Goal is to provide customers time to transition to latest version
 - The ISO currently supports multiple versions for OASIS
 - Customers continue to use unsupported versions, that are not tested for future upgrades.
 - Resulting in increased support time/cost for stakeholders and ISO when troubleshooting unsupported versions

OASIS – Lessons learned in 2019

- Controls implemented to date
 - Engage participants for simulation exercise for technology upgrades
 - Application self-heals when it encounters corrupt, no data returned or missing files with alerts for root cause investigation

OASIS – Lessons learned in 2019

- The Plan ahead
 - Version Management
 - Enforce the policy to support only two versions of services
 - Technical Specification will indicate supported and deprecated versions
 - Revised Technical Specification will be available on **5/29/2020**
 - Deprecated versions will be decommissioned on **9/1/2020**
 - Identifying patterns to embed information related to events resulting in failed market intervals within API and UI

OASIS – Version Management

- Path to latest Tech Specs on developer site:
 - Go to developer site
 - Click on OASIS under Apps
 - Navigate to Tech Specs
- Path to currently supported versions
 - Go to developer site & Click on OASIS
 - Navigate to Tech Specs section for these files
 - OASIS SingleZipServiceResults_SupportedVersions_April_09_2020.xls
 - OASIS GroupZipServiceResults_SupportedVersions_April_09_2020.xls

Snapshot of current OASIS Version Support - SingleZip

- As an example, in the table below currently we support 3 versions of services
 - PRC_INTVL_LMP Report
 - PRC_HASP_LMP Report

Report ID	Report URL
PRC_LMP	NULL=PRC_LMP&startdatetime=20200202T08:00-0000&enddate=20200203T08:00-0000&version=1&market_run_id=DAM&grp_type=ALL_APNODES
PRC_LMP	NULL=PRC_LMP&startdatetime=20200202T08:00-0000&enddate=20200203T08:00-0000&version=1&market_run_id=DAM&node=LAPLMG1_7_B2
PRC_INTVL_LMP	NULL=PRC_INTVL_LMP&startdatetime=20200202T08:00-0000&enddate=20200202T09:00-0000&version=1&market_run_id=RTM&node=LAPLMG1_7_B2
PRC_INTVL_LMP	NULL=PRC_INTVL_LMP&startdatetime=20200202T08:00-0000&enddate=20200202T09:00-0000&version=2&market_run_id=RTM&grp_type=ALL_APNODES
PRC_INTVL_LMP	NULL=PRC_INTVL_LMP&startdatetime=20200202T08:00-0000&enddate=20200202T09:00-0000&version=2&market_run_id=RTM&node=LAPLMG1_7_B2
PRC_INTVL_LMP	NULL=PRC_INTVL_LMP&startdatetime=20200202T08:00-0000&enddate=20200202T09:00-0000&version=3&market_run_id=RTM&grp_type=ALL_APNODES
PRC_INTVL_LMP	NULL=PRC_INTVL_LMP&startdatetime=20200202T08:00-0000&enddate=20200202T09:00-0000&version=3&market_run_id=RTM&node=LAPLMG1_7_B2
PRC_HASP_LMP	NULL=PRC_HASP_LMP&startdatetime=20200202T08:00-0000&enddate=20200202T09:00-0000&version=1&market_run_id=HASP&grp_type=ALL_APNODES
PRC_HASP_LMP	NULL=PRC_HASP_LMP&startdatetime=20200202T08:00-0000&enddate=20200202T09:00-0000&version=1&market_run_id=HASP&node=LAPLMG1_7_B2
PRC_HASP_LMP	NULL=PRC_HASP_LMP&startdatetime=20200202T08:00-0000&enddate=20200202T09:00-0000&version=2&market_run_id=HASP&grp_type=ALL_APNODES
PRC_HASP_LMP	NULL=PRC_HASP_LMP&startdatetime=20200202T08:00-0000&enddate=20200202T09:00-0000&version=2&market_run_id=HASP&node=LAPLMG1_7_B2
PRC_HASP_LMP	NULL=PRC_HASP_LMP&startdatetime=20200202T08:00-0000&enddate=20200202T09:00-0000&version=3&market_run_id=HASP&grp_type=ALL_APNODES
PRC_HASP_LMP	NULL=PRC_HASP_LMP&startdatetime=20200202T08:00-0000&enddate=20200202T09:00-0000&version=3&market_run_id=HASP&node=LAPLMG1_7_B2

Snapshot of current OASIS Version Support - GroupZip

- As an example, in the table below currently we support 3 versions of services
 - HASP_LMP_GRP Report
 - RTPD_LMP_GRP Report

Report ID	Report URL
DAM_LMP_GRP_v1_1	NULL=DAM_LMP_GRP&startdatetime=20200203T08:00-0000&version=1
HASP_LMP_GRP_v1	NULL=HASP_LMP_GRP&startdatetime=20200203T08:00-0000&enddate=20200203T09:00-0000&version=1
HASP_LMP_GRP_v3	NULL=HASP_LMP_GRP&startdatetime=20200203T08:00-0000&enddate=20200203T09:00-0000&version=3
HASP_LMP_GRP_v2	NULL=HASP_LMP_GRP&startdatetime=20200203T08:00-0000&enddate=20200203T09:00-0000&version=2
RTPD_LMP_GRP_v1	NULL=RTPD_LMP_GRP&startdatetime=20200203T08:00-0000&enddate=20200203T09:00-0000&version=1
RTPD_LMP_GRP_v3	NULL=RTPD_LMP_GRP&startdatetime=20200203T08:00-0000&enddate=20200203T09:00-0000&version=3
RTPD_LMP_GRP_v2	NULL=RTPD_LMP_GRP&startdatetime=20200203T08:00-0000&enddate=20200203T09:00-0000&version=2

OASIS Supported Versions Example - HASP_LMP_GRP

- The following table illustrates an example showcasing the versions supported by OASIS application vs documented Tech Specs

Report ID
HASP_LMP_GRP_v1
HASP_LMP_GRP_v3
HASP_LMP_GRP_v2

HASP_LMP_GRP	http://oasis.caiso.com/oasisapi/GroupZip?groupid=HASP_LMP_GRP&startdate=20130919T07:00:00&enddate=20130919T08:00:00&version=1
	OR
	http://oasis.caiso.com/oasisapi/GroupZip?groupid=HASP_LMP_GRP&startdate=20130919T07:00:00&enddate=20130919T08:00:00&version=3
	<u>Note: Version 3 response zip file will include separate file for each price component</u>

From TechSpec

CMRI – Version Management

- CMRI currently supports two versions of services which is in compliance with CAISO guidelines
- Path to latest Tech Specs on developer site:
 - Go to developer site
 - Click on CMRI under Apps
 - Navigate to Tech Specs

Open Discussion

- Some high level feedback we've heard but would like more details *on recent experiences*, so we can make these actionable
 - OASIS usability
 - Data takes too long to load
 - Customers want to pull more data at a time
 - Data missing or “incorrect” at times
 - Data in OASIS is inconsistent with data in CMRI

Follow up Questions / Communications

For follow-up questions or to suggest future topics please contact your client representative or submit a CIDI ticket.