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
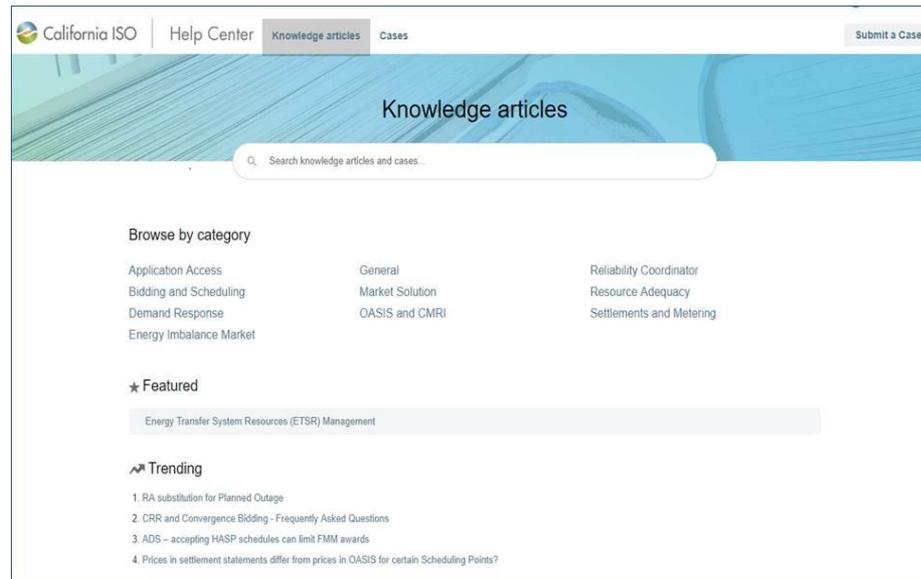
OASIS Release Notes

- 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:
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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

California ISO

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

California ISO

Knowledge Articles

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

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

California ISO

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

California ISO

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

California ISO

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&enddatetime=20200203T09:00-0000&version=1
HASP_LMP_GRP_v3	NULL=HASP_LMP_GRP&startdatetime=20200203T08:00-0000&enddatetime=20200203T09:00-0000&version=3
HASP_LMP_GRP_v2	NULL=HASP_LMP_GRP&startdatetime=20200203T08:00-0000&enddatetime=20200203T09:00-0000&version=2
RTPD_LMP_GRP_v1	NULL=RTPD_LMP_GRP&startdatetime=20200203T08:00-0000&enddatetime=20200203T09:00-0000&version=1
RTPD_LMP_GRP_v3	NULL=RTPD_LMP_GRP&startdatetime=20200203T08:00-0000&enddatetime=20200203T09:00-0000&version=3
RTPD_LMP_GRP_v2	NULL=RTPD_LMP_GRP&startdatetime=20200203T08:00-0000&enddatetime=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&startdatetime=20130919T07:00-0000&enddatetime=20130919T08:00-0000&version=1
From TechSpec	OR http://oasis.caiso.com/oasisapi/GroupZip?groupid=HASP_LMP_GRP&startdatetime=20130919T07:00-0000&enddatetime=20130919T08:00-0000&version=3 Note: Version 3 response zip file will include separate file for each price component

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.