



California ISO

Winter 2017 Release External Implementation Plan

Version 1.1

March 5, 2018

Contents

Revisions.....	4
Introduction	5
Executive Summary.....	5
Project Descriptions	5
Energy Imbalance Market Enhancements Winter 2017	5
Resource Adequacy Availability Incentive Mechanism (RAAIM) Calculation Modifications	7
Energy Imbalance Market Enhancements 2017	8
Deployment Strategy	10
Deployment Schedule Overview.....	10
Web Services.....	11
BSAP APIs	11
CMRI APIs	12
Master File APIs.....	13
OASIS APIs	14
Deployment and Activation Timeline.....	15
Deployment Timeline.....	15
Deployment Times, Outages, and Market Participant Actions.....	16
Pre-Deployment.....	16
OMS – TBD	18
AIM – January 31, 2018.....	18
Master File – February 12, 2018	18
CIRA – March 5, 2018.....	18
Integration – February 15, 2018	18
CMRI – TBD.....	18
OASIS – TBD.....	18
IFM/RTN/BAAOP – February 15, 2018	19
SIBR/BSAP – February 15, 2018	19
Settlements – March 26, 2018.....	19

External Implementation Plan

Master File – March 27, 2018	19
Communication and Support	20
Market Notices.....	20
Routine Issues and Support	20

Revisions

Date	Version	Description	Author
1/12/2018	Draft	Initial for Winter 2017 Release	Trang Deluca
1/31/2018	1.0	Modified schedules, added RAAIM references, clarification in MP Actions	Trang Deluca
3/5/2018	1.1	Modified schedules	Ken Nishimori

Introduction

Executive Summary

In the Winter 2017 Release, the California ISO will deploy numerous system changes from various projects and other efforts. The intent of this document is to provide market participants with a description of the timeline and activities for the Winter 2017 Release.

Project Descriptions

The Winter 2017 Release includes changes to support the following projects.

Energy Imbalance Market Enhancements Winter 2017

The EIM enhancements winter 2017 will facilitate managing bilateral contracts and utilizing the residual capabilities of EIM entities. The functionality will support EIM participation by US and non- US EIM BAAs.

More information can be found under Winter 2017 release on the Release Planning page at <http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx>.

Reliability Services Initiative 2017 - Implementation

- The proposed provisions define new resource adequacy rules for planned outage substitution for generic RA resources. The proposal also creates changes to the monthly RA process in terms of timeline and deficiency analysis of RA data.

More information can be found under Winter 2017 release on the Release Planning page at

<http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx>.

Resource Adequacy Availability Incentive Mechanism (RAAIM) Calculation Modifications

California ISO intends to release a new RAAIM Calculation Modifications within the Settlements system.

The fix properly weights flexible capacity for both relative (in percent) and absolute (in MW) availability, as compared to generic capacity in a resource's total availability.

For Configuration Guides, please refer to CG PC RA Availability Incentive Mechanism v5.4, CC 8830 v5.2, and CC 8831 v5.1.

Energy Imbalance Market Enhancements 2017

The purpose of this project is to collectively address the following important issues identified by policy, operations, technology, business and market participants to improve the functions and features of resource modeling and Energy Imbalance Market (EIM) due to market participant demands and needs:

1. **Access & Integration: EIM Entity Access in ALFS, MF, OASIS, WebOMS, CMRI**

Target:

- Support a new EIM entity through configuration without application changes, in ALFS, MF, OASIS, WebOMS, and CMRI. Move existing External BAA Operational reports into CMRI, subject to certifications. **(2017)**

Business need:

- Efficiently Support new EIM entities without application release
- Bypasses endorsement of EIM Entity for EIM Entity SC wishing to provide access
- Ability for EIM Entities to retrieve FSP-Provided VER Forecasts from CMRI

2. **Data Report: EIM Data Report Enhancements to Support Market Participant and EIM Entity Settlements**

2.1 Alternative OASIS Report for all RT LAP Prices.

Target:

- Provide an OASIS report for all RT LAP prices. (Winter 2017)

Business need:

- Presently the method for obtaining ELAP prices for hourly load settlements adds significant time and resources to manage on market participants. The bill determinant files are becoming very large.

2.2 Settlements Publish EIM Transfer Amount between EIM Entities.

Target:

- ISO settlements will publish bill determinants that contains EIM transfer \$ amount between EIM entities. (Winter 2017)

Business need:

- Evaluate alternatives for transactions occurring between two EIM entities to be used for outside-ISO settlements.

2.3 Display Default Proxy Commitment Cost Bids on CMRI.

Target:

- ISO will publish CMRI report for default proxy commitment cost bids (start-up, min-load, and transition costs) for all EIM and non-EIM resources. (2017)

Business need:

- Some EIM entities requested these information be posted by ISO.

2.4 Display Input Data of Flex Ramp Requirements on OASIS**Target:**

- ISO will publish OASIS report for input data of flex ramp requirements. (2017)

Business need:

- Some EIM entities requested these information be posted by ISO for transparency.

3. Software Enhancements: EIM Software Enhancements**3.1 Update EIM logos on EIM GUI's****Target:**

- Use generic EIM logo on all GUI's used by EIM participants. (2017)

Business need:

- Some EIM entities requested this enhancement.
-

4. ETSR: Change the ETSR Formulation to Separate the Base Energy Transfer to Distinct NonOptimizable ETSRs**Target:**

- Define separate ETSRs for base energy transfers to distinguish base and dynamic energy transfers so that EIM Entity SCs can submit base energy transfers that will not be optimized by the market, while submitting ETSR limits that would apply to dynamic energy transfers only. Changes are contained in the market optimization engine only, no other systems are affected; there are no changes to data interfaces. (Winter 2017)

Business need:

- Modeling enhancements.

More information can be found under Fall 2017 release on the Release Planning page at <http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx>.

Deployment Strategy

Deployment Schedule Overview

The system changes will be implemented in a phased manner. The systems changes will be deployed/activated according to the following drops and dates.

Description	Deployment	Project
OMS	January 24, 2018	EIM Enhancements
AIM	January 31, 2018	RSI
Master File	February 12, 2018	EIM Enhancements
Integration	February 15, 2018	EIM Enhancements
IFM/RTN/BAAOP	February 15, 2018	EIM Enhancements
SIBR/BSAP	February 15, 2018	EIM Enhancements
CIRA	March 5, 2018	RSI
CMRI	TBD	EIM Enhancements
OASIS	TBD	Winter 2017 Release
Settlements	March 26, 2018	Winter 2017 Release
Master File	March 27, 2018	EIM Enhancements

The strategy of spreading the deployment over time is in the interest of minimizing impact on resources and is consistent with deployment strategies implemented during previous major deployments. Some of these deployments will require brief outages. See *Deployment Times, Outages, and Market Participant Actions* section of this document for times and durations for each application.

The technical details for these system changes can be found on the Winter 2017 Release external site located at: <http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx>.

Web Services

Refer to the System Access Information document and System Interface Change Summary document for details about specific URLs:

- http://www.caiso.com/Documents/SystemAccessInformation_MarketParticipants.pdf
- <http://www.caiso.com/Documents/SystemInterfaceChangeSummary.pdf>

BSAP APIs

BSAP Interface Specification:

<http://www.caiso.com/Documents/BaseScheduleInterfaceSpecificationWebServicesWinter2017.pdf>

BSAP Artifacts: http://www.caiso.com/Documents/BSAPArtifacts_Winter2017Release.zip

Service	Project	Availability as of this Deployment
RetrieveBaseScheduleResults		
RetrieveBaseScheduleResults_BSAPv1_AP	EIM Winter 2017	Modification
RetrieveBaseScheduleResults_BSAPv1_DocAttach_AP		
SubmitBaseSchedule		
SubmitBaseSchedule_BSAPv1_AP	EIM Winter 2017	Modification
SubmitBaseSchedule_BSAPv1_DocAttach_AP		

CMRI APIs

CMRI Interface Specification: http://www.caiso.com/Documents/CMRI-InterfaceSpecification_v3_7_0Clean_Winter2017Release.pdf

CMRI Artifacts: http://www.caiso.com/Documents/CMRI-ArtifactsPackage_v1_0_Winter2017Release.zip

Service	Project	Availability as of this Deployment
RetrieveResourceRampCapacity		
RetrieveResourceRampCapacity_CMRIv1_AP	EIM	New
RetrieveResourceRampCapacity_CMRIv1_DocAttach_AP	Winter 2017	

Master File APIs

Master File Interface Specification:

http://www.caiso.com/Documents/MasterFileInterfaceSpecification_v3_6Clean_Winter2017Release.pdf

Master File Artifacts:

http://www.caiso.com/Documents/MasterFileArtifacts_GeneratorResourceDataTemplate_v4_0_1Winter2017Release.zip

Service	Minor Version	RDT	Project	Availability as of this Deployment
RetrieveGeneratorRDT				
RetrieveGeneratorRDT_MFRDv4_AP	20180201	GRDT 11.0	EIM Winter 2017	Modification
RetrieveGeneratorRDT_MFRDv4_DocAttach_AP	20180201	GRDT 11.0		
SubmitGeneratorRDT				
SubmitGeneratorRDT_MFRDv4_AP	20180201	GRDT 11.0	EIM Winter 2017	Modification
SubmitGeneratorRDT_MFRDv4_DocAttach_AP	20180201	GRDT 11.0		

OASIS APIs

OASIS Interface Specification: http://www.caiso.com/Documents/OASIS-InterfaceSpecification_v5_1_2Clean_Fall2017Release.pdf

OASIS Artifacts: http://www.caiso.com/Documents/OASIS-ArtifactsPackage_v1_2_Fall2017Release.zip

Service	Project	Availability as of this Deployment
PRC_RTM_LAP	EIM 2017	New
PUB_CSP_OFFER_SET	RSI 2017	New

Deployment and Activation Timeline

The Winter 2017 Release is scheduled for deployment across multiple dates. Each deployment may incur outages of varying lengths to specific systems. The table below highlights the systems that will be impacted by each deployment and provides relevant details for market participants.

Deployment Timeline

Date	Deployment Information	Status
10/01/2017	Communicate System Access Information Document	Complete
1/19/2018	Revise System Access Information Document	On-Track
1/19/2018	Communicate Implementation Plan	On-Track
TBD	OMS	TBD
1/31/2018	AIM	Complete
2/12/2018	Master File	Complete
2/15/2018	IFM/RTN/BAAOP	Complete
2/15/2018	SIBR/BSAP	Complete
2/15/2018	Integration	Complete
3/5/2018	CIRA	Complete
TBD	CMRI	On-Track
TBD	OASIS	On-Track
3/26/2018	Settlements	On-Track
3/27/2018	Master File	On-Track

Deployment Times, Outages, and Market Participant Actions

Pre-Deployment

System	Deployment Action	Outage Time	MP
Communicate System Access Information	10/01/2017	N/A	Review System Access Information document
CIRA New RA & Supply Plan Templates Available	Now Available	N/A	Review/Use New RA & Supply Plan Templates <ul style="list-style-type: none"> RSI 2017 RA Plan (can also be downloaded from CIRA 2/13/2018): http://www.caiso.com/Documents/ResourceAdequacyPlanTemplate_2018.xls RSI 2017 Supply Plan (can also be downloaded from CIRA 2/13/2018): http://www.caiso.com/Documents/SupplyPlanTemplate_2018.xls For April 2018 compliance month MPs expected to start submitting 2/13/18 for April 2018 compliance month
RSI Training	1/10/2018	N/A	Attend RSI Training
RSI Training	1/17/2018	N/A	Attend RSI Training
Revise System Access Information	1/19/2018	N/A	Review System Access Information document
Communicate Implementation Plan	1/19/2018	N/A	Review Implementation Plan
CIRA User Guide	2/1/2018	N/A	Review CIRA User Guide

External Implementation Plan

CIRA Historic RA Reports	Prior to 2/13/2018	N/A	<ul style="list-style-type: none"> Download Historic RA Reports (for Pre-RSI-2017 months) for break-down of RA from Replacement Details Columns The RA reports beginning RSI-2017 will continue to show the total RA and will have the new format based on RSI2017 revisions.
CIRA Supplier Roles	Prior to 2/13/2018	N/A	<ul style="list-style-type: none"> Suppliers to Provision New Read-Only/Read-Write Roles to Certificates The New Supplier Roles Provide Suppliers Access to: <ul style="list-style-type: none"> Outage Analysis (for their outages) POSO Analysis (for their outages) Provide Substituions for their Planned Outages
RSI Real-Time Substitutions	Starting 3/31/18	N/A	<p>Submit CIDI cases for Real-Time Substitutions Starting on 3/31/2018</p> <p>RT substitution for 3/31 (a Saturday) will need to be handled manually. If a substitution needs to span March into April, then a CIDI will need to be submitted and ISO will create this on MP's behalf.</p> <p>For DA, split the substitution into 3/31 and start on 4/1 as 2 different transactions.</p>
CIRA New RA & Supply Templates Effective	4/1/2018	N/A	N/A
RAAIM Revised Charge Codes in Production	4/1/2018 – 5/31/218	N/A	Production implementation and deployment of revised charge codes
New RAAIM Calculation as Advisory	4/1/2018	N/A	New RAAIM calculation will be in Production as advisory
Revised RAAIM as Financially Binding	6/1/18	N/A	Revised RAAIM penalties and incentives become financially binding on 6/1/2018 going forward.

All times are Pacific

OMS – TBD

System	Deployment Time	Outage	MP Action
OMS	9:00 AM to 10:00 AM	OMS UI/API will be unavailable	N/A

All times are Pacific

AIM – January 31, 2018

System	Deployment Time	Outage	MP Action
AIM	2:00 PM to 3:00 PM	No outage anticipated	N/A

All times are Pacific

Master File – February 12, 2018

System	Deployment Time	Outage	MP Action
Master File	10:00 AM to 3:00 PM	No outage anticipated	None

All times are Pacific

CIRA – March 5, 2018

System	Deployment Time	Outage	MP Action
CIRA	10:00 AM to 11:00 AM	CIRA UI/API will be unavailable	N/A

All times are Pacific

Integration – February 15, 2018

System	Deployment Time	Outage	MP Action
Integration	1:00 PM to 2:00 PM	Brief interruption for Web Services (API)	N/A

All times are Pacific

CMRI – TBD

System	Deployment Time	Outage	MP Action
CMRI	1:00 PM to 2:00 PM	Brief interruption for CMRI UI/API	N/A

All times are Pacific

OASIS – TBD

System	Deployment Time	Outage	MP Action
OASIS	1:00 PM to 2:00 PM	Brief interruption for OASIS UI/API	N/A

All times are Pacific

IFM/RTN/BAAOP – February 15, 2018

System	Deployment Time	Outage	MP Action
IFM/RTN/BAAOP	2:00 PM to 3:00 PM	Brief interruption for BAAOP UI/API	None

All times are Pacific

SIBR/BSAP – February 15, 2018

System	Deployment Time	Outage	MP Action
SIBR/BSAP	2:00 PM to 3:00 PM	Brief interruption for SIBR/BSAP UI/API	None

All times are Pacific

Settlements – March 26, 2018

System	Deployment Time	Outage	MP Action
Settlements	10:00 AM to 11:00 AM	No outage anticipated	N/A

All times are Pacific

Master File – March 27, 2018

System	Deployment Time	Outage	MP Action
Master File	10:00 AM to 3:00 PM	Brief interruption for Master File UI/API from 2:00 PM to 3:00 PM	N/A

All times are Pacific

Communication and Support

Below is the Winter 2017 Release communication schedule:

Description	Method	Frequency	Responsible
Winter 2017 Release Deployment Market Notice	E-mail www.caiso.com	As Needed	ISO
Release Users Group (RUG)	(866) 528-2256 5251941	Every Other Week	ISO

Market Notices

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Routine Issues and Support

All normal support processes should be followed for support functions. The ISO Help Desk can be reached at (916) 351-2309.