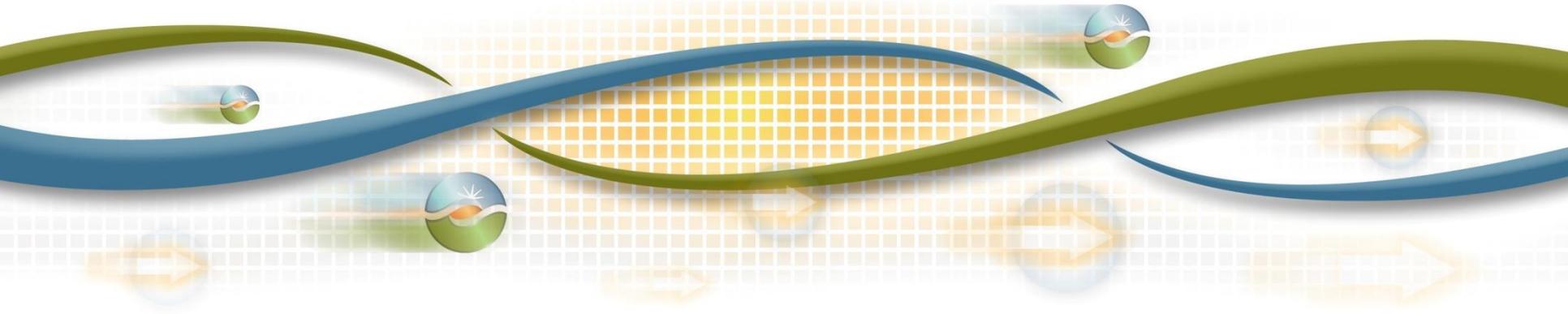# Release User Group Agenda

January 16, 2018   *10:00 a.m.–11:00 a.m.* (Pacific Time)

Web Conference Information	Conference Call Information
Web Address: https://caiso.webex.com/meet/RUG Meeting Number: 960 941 245 Audio connection instructions will be available after connecting to the web conference. When prompted, select "Call me" and enter the phone number you will use during the call. You will be called by the conference shortly.	Dial-in Number: 866-528-2256 International Dial-in: 216-706-7052 Access Code: 291 426 5
The ISO is now recording the RUG and TUG calls and will be posting the recordings on the Release Planning webpage for stakeholders to listen to at their convenience.	

Release User Group Agenda

January 16, 2018   *10:00 a.m. – 11:00 a.m. (Pacific Time)*

Time	Topic	Facilitator
10:00 – 10:05	Agenda & ISO Roll call	Adrian Chiosea
10:05 – 10:45	Release Plan	Brett Bruderer Joanne Alai Marcelo Da Costa Raymond Riley Marci Stuckey John Williams Christopher McIntosh Jami Herguth Prince Phillip Sandhya Balasubramanian Eureka Cullado Indu Nambiar Justin Wong LuAnn Rivera Craig Williams Trang Deluca Elli Johnston

California ISO

The ISO offers innovative training programs

Date	Training All classes are offered at our Folsom, CA campus unless noted otherwise
Feb 6-7	Get to Know the ISO
Feb 8	Settlements 101
Feb 9	Settlements 201
April 19	Welcome to the ISO (webinar)
May 8-9	Get to Know the ISO
May 10	Settlements 101
May 11	Settlements 201

The ISO's External Training & Readiness team provides quality training and readiness programs that successfully prepare Stakeholders to effectively engage with the ISO

Visit our new **Learning Center** web page to access our training calendar, register for courses and find other useful resources, including computer based training courses, at:

http://www.caiso.com/participate/Pages/LearningCenter/default.aspx

Contact us: CustomerTraining@caiso.com

Release Plan 2017 – Spring 2018

Winter 2017
- EIM 2017 Enhancements
- EIM Winter 2017 Enhancements
- Energy Storage and DER Phase 1C
- RIMS Functional Enhancements
- RAAIM Calculation Modifications
- Reliability Services Initiative 2017
- EIM 2018 Idaho Power Company
- EIM 2018 Powerex

Independent 2018
- Deactivation of TLS 1.0 & 1.1
- OMS Generation Nature of Work Updates
- Black Start and System Restoration Phase 2

Spring 2018
- Commitment Cost Enhancement Phase 3
- SIBR UI Upgrade

Release Plan – Fall 2018 – Spring 2020

Fall 2018 – tentative, subject to impact assessment
- Green House Gas Enhancements for EIM
- Contingency Modeling Enhancements
- Commitment Costs and Default Energy Bid Enhancements
- Aliso Canyon Phase 3
- Settlements Performance Improvements
- Energy Storage and DER Phase 2
- Generator Contingency and Remedial Action Scheme Modeling
- ADS User Interface Replacement
- Capacity Procurement Mechanism – Risk-of-Retirement

Spring 2019
- EIM 2019 Balancing Authority of Northern California (BANC) / SMUD
- EIM 2019 LADWP

Fall 2019 – tentative, subject to impact assessment
- Frequency Response Phase 2
- Congestion Revenue Right auction efficiency (July 2019)
- Flexible Resource Adequacy Criteria and Must-offer Obligation Phase 2
- Transmission Access Charge billing structure
- Enhanced Day-Ahead Market

Spring 2020
- EIM 2020 Salt River Project
- EIM 2019 Seattle City Light

California ISO

Release Plan –subject to further planning

TBD – tentative, subject to impact assessment
- Imbalance Conformance Enhancements (ICE)
- ESDER Phase 3
- Intertie Deviation Settlement
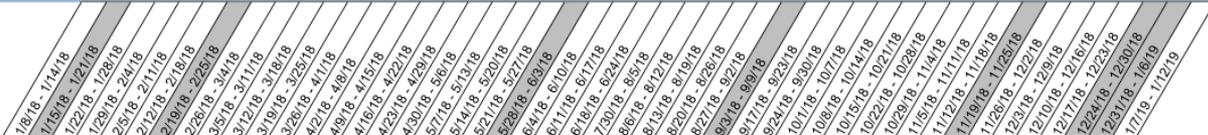- Variable Energy Resource Dispatch Operating Point (VER DOT)

California ISO

Release Schedule - 2018

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

Product View - CMRI UI and API changes

Release	Project	Change Type	External Impact	MP Action	UI Change	Service Name & Major Version	Minor Version	MAP Stage	Production Activation	Artifacts Package	Tech Spec Version
2017	EIM 2017	New	EIM Market	Adopt when ready	Tab: Default Bids New Report: Default Commitment Costs	retrieveExternalDefaultCommitmentCost_v1 retrieveExternalDefaultCommitmentCost_v1_DocAttach	20171001	12/21/2017	12/22/2017	v1.0 (Fall)	3.6.0
2017	EIM 2017	New	EIM Market	Adopt when ready. API is backwards compatible	Tab: EIM New Report: EIM Bid Capacity	retrieveEIMBidCapacityPercentage_v2 retrieveEIMBidCapacityPercentage_v2_DocAttach	20171001	12/21/2017	12/27/2017 for TD 1/1/2018	v1.3 (released 10/27)	3.6.3 (released 10/27)
2017	Enhancement	New	CAISO Market	Adopt when ready	Tab: Post-Market New Report: Regulation Pay for Performance	N/A	N/A	TBD (2018)	TBD (2018)	N/A	N/A
2017	Imperial Valley	New	PST Operators	Adopt when ready	Tab: Phase Shifter New Report	N/A	N/A	9/8/2017	12/21/2017	N/A	N/A
Winter 2017	EIM 2017	New	CAISO & EIM Market	Adopt when ready	Tab: EIM New Report: Resource Ramp Capacity	retrieveResourceRampCapacity_v1 retrieveResourceRampCapacity_v1_DocAttach	20180201	TBD	4/1/2018	v1.0 (Winter) (released 11/6)	3.7.0 (released 11/6)
Spring 2018	CCE3	New	CAISO Market	Adopt when ready	Tab: Default Bids New Report: Actual Limitation Values	retrieveActualLimitationValues_v1 retrieveActualLimitationValues_v1_DocAttach	20171001	March 2018	5/1/2018	v1.0 (Fall)	3.6.3
Spring 2018	CCE3	New	CAISO Market	Adopt when ready	Tab: Default Bids New Report: Resource Opportunity Costs	retrieveResourceOpportunityCost_v1 retrieveResourceOpportunityCost_v1_DocAttach	20171001	March 2018	5/1/2018	v1.0 (Fall)	3.6.3

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

California ISO

Product View - OASIS UI and API changes

Release	Project	Change Type	External Impact	MP Action	UI Change	Web Service	MAP Stage	Production Activation	Artifacts Package	Tech Spec Version
2017	EIM 2017	New	EIM Market	Adopt when ready	Tab: Energy New Report: Flexible Ramp Requirements Inputs	ENE_EIM_FLEX_RAMP_INPUT	11/7/2017	**12/22/2017**	v1.2	5.1.1
Winter 2017	EIM 2017	New	CAISO & EIM Market	Adopt when ready	Tab: Prices New Report: Hourly RTM LAP Prices	PRC_RTM_LAP	1/19/2018	4/1/2018	V1.2	5.1.1
Winter 2017	RSI	New	CAISO Market	Adopt when ready	Tab: Public Bids New Report: CSP Offer	PUB_CSP_OFFER_SET	12/5/2017	4/1/2018	V1.2	5.1.1

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

California ISO

Product View - Master File changes

Release	Project	Change Type	External Impact	MP Action	UI Change	Web Service	Major Version	Minor Version	MAP Stage	Production Activation	Artifacts Package	Tech Spec Version
Winter 2017	EIM 2017	Modify	EIM Market	Required for Generic NGR	N/A	retrieveGeneratorRDT	4	20180201	12/1/2017	4/1/2018	v4.0.1	V3.6
Winter 2017	EIM 2017	Modify	EIM Market	Required for Generic NGR	N/A	submitGeneratorRDT	4	20180201	12/1/2017	4/1/2018	v4.0.1	V3.6
Spring 2018	BRE-B CCE3 RSI	Modify	CAISO & EIM Market	Required to provide CCE3 values		retrieveGeneratorRDT	4	20180501	March 2018	5/1/2018	v4.1.2	V4.1.1
Spring 2018	BRE-B CCE3 RSI	Modify	CAISO & EIM Market	Required to provide CCE3 values		submitGeneratorRDT	4	20180501	March 2018	5/1/2018	V4.1.2	V4.1.1
Spring 2018	CCE3	Modify	CAISO Market	Required for ULPDT at Config Level	Upload Tab: ULPDT similar to RDT	N/A	N/A	N/A	March 2018	5/1/2018	N/A	N/A
Spring 2018	CCE3	Modify	CAISO Market	Required for ULPDT at Config Level	Reports Tab: ULPDT similar to RDT	N/A	N/A	N/A	March 2018	5/1/2018	N/A	N/A

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

California ISO

Master File Updates & Clarifications

Winter Release includes a new Fuel Type enumeration (GNRC) to identify generic NGRs

- There will be no structural changes to the RDT
  - GRDT spreadsheet version 11 will continue to be the production version
- An updated Tech Spec will be posted by 10/10
  - The Tech Spec will only be updated to include the new Fuel Type enumeration.

Spring Release of MF GRDT includes CCE3, BREB, and RSI attributes

  - GRDT version 12 and Tech Spec 4.1.1 have been posted since June
  - The Spring RDT and Tech Spec was updated in December to include recent changes (e.g. ICE Hub)
- GRDT Highlights (Following slide has the time lines)
  - RESOURCE tab – Add Electric Region (R/O), Market Max Daily Starts (R/W), COM MW (R/O), **Power Price Hub (R/O)**
  - Ramp Tabs (Resource & Configuration : Operational, Regulation, and Op Reserve) – Add Market Ramp Rate (R/W); ~~discontinue supporting Min/Worst Ramp Rate (submitted values will be ignored)~~
  - CONFIGURATION tab – Add Implied Starts (previously documented as CT Starts) (R/W)
  - TRANSITION tab – Add Market Max Daily Transitions (R/W), Implied Starts (R/O)
- ULPDT Highlights
  - Add Configuration ID
  - ULPDT will be loaded via Batch Process with automated Batch Status notification
  - Compare Report available
  - Validation Rules will continue to appear on UI, not in a separate Validation Report

Master File GRDT Clarifications

	Active in Master File	Active in Market
Electric Region	Fall 2017 (BREB)	Fall 2017
COM MW	Fall 2017 (RSI)	Fall 2017
Market Max Daily Starts	Spring 2018 SC may update value via the GRDT/Master File UI, but no market impact until Fall 2018	Fall 2018
Power Price Hub	Spring 2018 CAISO will populate	Fall 2018
Market Ramp Rate (Operational, Operating Reserve, Regulation)	Spring 2018 SC may update value via the GRDT/Master File UI, but no market impact until Fall 2018	Fall 2018
Min/Worst Ramp Rate to be discontinued	Values remain active in market until Fall 2018	Discontinued Fall 2018
Configuration: Implied Starts	Spring 2018 SC may update value via the GRDT/Master File UI, but no market impact until Fall 2018	Fall 2018
Transition: Market Max Transitions	Spring 2018 SC may update value via the GRDT/Master File UI, but no market impact until Fall 2018	Fall 2018
Transition: Implied Starts	Spring 2018 Value is derived from Configuration Implied Starts. No market impact until Fall 2018	Fall 2018

California ISO

Project Info	Details/Date
Application Software Changes	Address enhancements identified by policy, operations, technology, business and market participants. **Scope:** 1. Access & Integration Enhancements: EIM Entity Access in ALFS, MF, OASIS, WebOMS, and CMRI. 2. EIM data report enhancements to support market participant and EIM entity settlements 3. Change to ETSR formulation to separate base energy transfer to distinct non-optimizable ETSRs.
BPM Changes	Energy Imbalance Market: Access & Integration, Data Report Outage Management: Access & Integration Market Instruments: Access & Integration, Data Reports Market Operations: Data Report Settlements & Billing: Data Report
Business Process Changes	N/A

Winter 2017 - EIM Enhancements 2017– Phase 2

Milestone Type	Milestone Name	Dates	Status
Board Approval	BOG Approval	Sep 06, 2016	✓
External BRS	Post External BRS	Jan 23, 2017	✓
	Post Updated External BRS to public site	Apr 10, 2017	✓
Tariff	File Tariff	N/A	
Config Guides	Post Configuration Guides	Jun 27, 2017	✓
Tech Spec	Publish Updated Technical Specifications: CMRI v3.6.3	Oct 27, 2017	✓
	Publish Updated Technical Specifications: OASIS v5.1.2	Oct 27, 2017	✓
	Publish Updated Technical Specifications: Master File v4.1.1	Jun 30, 2017	✓
Market Sim	Market Sim Window	Feb 01, 2018 - Feb 23, 2018	
BPMs	Publish Final Business Practice Manuals	Mar 01, 2018	
Production Activation	EIM Enhancements 2017 - Phase 2	Apr 02, 2018	

California ISO

Project Info	Details/Date
Application Software Changes	**Scope and System Impact:** • Auto-matching for post T–40 Intertie and other EIM Non-Participating Resource (EIMNPR) schedule changes from a single dedicated EIMNPR with the ability to generate or consume energy **(MF, RTM)** • Auto-mirroring for ISO import/export schedules at ISO Scheduling Points **(MF, RTM)** • BASE ETSR imbalance energy settlement: LMP at specified financial location **(MF, RTM, Settlement)** • No-EIM Fee: Exclude EIM administrative fee for non-US transactions after T–40 **(MF, RTM, Settlement)** • Suppress LMP publication in OASIS for non-US Pnodes **(MF, OASIS)** • Allow submission of Base Generation Distribution Factors (GDFs) for aggregate EIMNPR **(BSAP, RTM)** • Allow EIM Entity control to enforce/not enforce EIM BAA internal transmission constraints **(MF,RTM)** • Report resource ramp capability in CMRI for SCs **(BSAP, CMRI)** • Allow EIM and other resources modeled as an aggregation using the Generic NGR model that has the ability to generate or consume energy **(MF, RTM, Settlement)**
BPM Changes	Energy Imbalance Market and Settlements & Billing
Business Process Changes	Manage Real Time Operations - Maintain Balancing Area

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Nov 29, 2017	✓
BPMs	Draft BPM changes	Dec 01, 2017	✓
	Publish Final Business Practice Manuals	April 1, 2018	
External BRS	Post External BRS	Aug 04, 2017	✓
	Post External BRS v2	Nov 13, 2017	✓
Tariff	Draft Tariff	Nov 03, 2017	✓
	File Tariff	Dec 15, 2017	✓
Config Guides	Post Config Guides	Oct 25, 2017	✓
Tech Spec	Post ISO Interface Spec (Tech spec)	Nov 15, 2017	✓
	Post CMRI Tech Spec	Nov 06, 2017	✓
	Post MF Tech Spec	Oct 13, 2017	✓
Training	External Training – Webinar	Jan 10, 2018	✓
Market Sim	Market Sim Window	Dec 01, 2017 - Jan 31, 2018	
Production Activation	EIM Enhancements Winter 2017	Apr 01, 2018	

Project Info	Details/Date
Business Requirements Specification	ESDER 1C requirements incorporated in version 1.1 of the BRS for EIM Enhancements Winter 2017. The nine BRQs identified as ESDER 1C requirements related to the Generic NGR model are: BRQ161, BRQ162, BRQ163, BRQ321, BRQ322, BRQ324, BRQ465, BRQ466, BRQ516
Application Software Changes	Allow market participant to registry NGR Generic Resource (Generic, new subtype of NGR, in addition to LESR and DDR) of NGR with load and generation modes without SOC **MF**: Define NGR resource with subtype Generic **SIBR/BSAP/IFM-RTM** • SC to submit bids for NGR Generic resource • SC to submit EIM Base Schedule for NGR Generic resource • Combine the distributed schedules from multiple aggregated resources that have overlapping aggregation in NA **Settlement**: Settlement calculation to NGR Generic resources level **WebOMS** - Include NGR Generic resource outage/de-rate in the market
BPM Changes	Market Operations Energy Imbalance Market Settlements and Billing

Milestone Type	Milestone Name	Dates	Status
ESDER 1C milestones	Same as EIM Winter Enhancements 2017		

California ISO

Winter 2017 – RIMS 5

Project Info	Details/Date	Status
Application Software Changes	Functional enhancements resulting from the Customer Partnership Group CPG. More details to be provided in the future.	
BPM Changes	Generator Interconnection and Deliverability Allocation Procedures Generator Interconnection Procedures Managing Full Network Model Metering Generator Management Transmission Planning Process	
Customer Partnership Group	10/16/15	✔
Application and Study Webinar	3/31/16	✔

Milestone Type	Milestone Name	Dates	Status
Board Approval	Board approval not reqiured	N/A	
BPMs	Generator Interconnection and Delivery Allocation	Apr 29, 2016	✔
External BRS	External BRS not Required	N/A	
Tariff	No Tariff Required	N/A	
Config Guides	Configuration Guides not required	N/A	
Tech Spec	No Tech Specifications Required	N/A	
Market Sim	No Market Sim	N/A	
External Training	• *Train the PTOs.*	*February 5, 2018*	
	• *Provide a half hour intro to the new RIMS App at the Resource Interconnection Fair.*	*March 6, 2018*	
	• *WebEx full training provided by the Training Team in coordination with the MCI team.*	*March 20, 2018*	
Production Activation	RIMS5 App & Study	Mar 21, 2016	✔
	RIMS 5 Queue Management, Transmission & Generation	February/March, 2018	

Winter 2017 – RAAIM Calculation Modifications

Project Info	Details/Date
Application Software Changes	**RAAIM (Resource Adequacy Availability Incentive Mechanism)** – 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.

Milestone Type	Milestone Name	Dates	Status
Configuration Guide	Draft Technical Documents (Draft Settlements BPM)	Nov 8, 2017	✓
Configuration Output File	Draft Configuration Output File (updated version will be provided prior to Market Sim)	Nov 22, 2017	✓
BPMs	Post BPM Changes - Settlements & Billing	Feb 2, 2018	
External Validation	New calculation will be deployed into Production as advisory beginning 4/1/2018	Apr 1, 2018	
Market Sim	Market Simulation	Jan 16 – Feb 1, 2018	
Production Deployment	Implement and deploy into Production revised charge codes per Winter release deployment plan.	Apr 1 – May 31 2018	
Production Activation	Revised RAAIM penalties and incentives become financially binding on 6/1/2018 going forward.	June 1, 2018	

California ISO

Project Info	Details/Date

Application Software Changes	**Scope:**
	Redesign of Replacement Rule for System RA and Monthly RA Process.
	• RA Process and Outage Rules for implementation for 2017 RA year.
	• CSP Offer Publication (RSI 1A scope)
	• Local and system RA capacity designation
	• RA showing requirements for small load serving entities (LSEs)
	• RA showing tracking and notification
	
	Impacted Systems:
	    • OASIS
	    • Settlements
	    • CIRA
	CIRA:
	• Modifications to the RA and Supply Plan to show breakdown of local and system. Validation rules need to be updated.
	• Update planned/forced outage substitution rules
	• Allow market participants to select how much system/local MWs to substitute.
	• Modification of UI screens to accommodate system/local MW split.
	• Enhance system to allow exemption from submission of RA Plans for LSE that have a RA obligation < 1 MW for a given capacity product.
	
	Settlements:
	• Splitting local from system in upstream RA system impacts the RAAIM Pre calculation.

BPM Changes	• Reliability Requirements: Changes to the monthly RA process • Settlements and Billing
Business Process Changes	**Manage Market & Reliability Data & Modeling** • Manage Monthly & Intra-Monthly Reliability Requirements • Manage Yearly Reliability Requirements

California ISO

Winter 2017 - Reliability Services Initiative 2017

Milestone Type	Milestone Name	Dates	Status
Board Approval	Board Approval	May 12, 2015	✓
BPMs	Post Draft BPM Changes - Reliability Requirements	Dec 05, 2017	✓
	Post Draft BPM Changes - Settlements & Billing	Aug 30, 2017	✓
External BRS	Post Updated External BRS v1.1 (RSI 2)	Apr 07, 2017	✓
	Post Updated External BRS v1.3 (RSI 1B)	Mar 03, 2017	✓
	Post RSI 2017 External BRS v2.0	Apr 19, 2017	✓
Tariff	File Tariff	Sep 29, 2017	✓
Config Guides	Config Guide	Jun 23, 2017	✓
Tech Spec	Publish Technical Specifications	Apr 03, 2017	✓
Training	External Training	Jan 10, 2018	✓
	External Training	Jan 17, 2018	
Market Sim	Market Simulation	Dec 05, 2017 - Jan 31, 2018	
Production Deployment	Production Deployment	Feb 13, 2018	
Production Activation	Production Activation	Apr 01, 2018	

Winter 2017 – EIM Idaho Power Company

Project Info	Details/Date
Application Software Changes	Implementation of Idaho Power Company as an EIM Entity.
BPM Changes	EIM BPM will be updated if needed to reflect new modeling scenarios identified during Idaho Power implementation and feedback from Idaho Power.
Market Simulation	The Idaho Power Company network model has been integrated into the ISO non-production environment. Day in the Life (pre-Market Simulation) testing is complete. Market Simulation is in progress and continues through January 2018.
Parallel Operations	February 1, 2018 – March 30, 2018

Milestone Type	Milestone Name	Dates	Status
Tariff	File Readiness Certification	Apr 01, 2018	
Market Sim	Market Sim Window	Dec 01, 2017 - Jan 31, 2018	
Parallel Operations	Parallel Operations Window	Feb 01, 2018 - Mar 30, 2018	
Production Activation	EIM - Idaho Power	Apr 04, 2018	

California ISO

Winter 2017 – EIM Powerex

Project Info	Details/Date
Application Software Changes	Implementation of Powerex as an EIM Entity.
BPM Changes	EIM BPM will be updated if needed to reflect new modeling scenarios identified during the Powerex implementation.
Market Simulation	The Powerex network model has been integrated into the ISO non-production environment.
	Day in the Life (pre-Market Simulation) testing is complete.
	Market Simulation is in progress and continues through January 2018
Parallel Operations	February 1, 2018 – March 30, 2018

Milestone Type	Milestone Name	Dates	Status
Tariff	File Readiness Certification	Feb 28, 2018	
Market Sim	Market Sim Window	Dec 01, 2017 - Jan 31, 2018	
Parallel Operations	Parallel Operations Window	Feb 01, 2018 - Mar 30, 2018	
Production Activation	EIM - Powerex	Apr 04, 2018	

2018- Black Start and System Restoration Phase 2

Project Info	Details/Date
Application Software Changes	**Settlements:** • Modifications to existing charge codes for Black Start capacity and Black Start allocations will need to occur. **MPP (Market Participant Portal):** • Possibility to use current functionality for receiving RMR invoices for Black Start units.
BPM Changes	**Definitions & Acronyms:** • Revision of the following definitions to match the Tariff language: Ancillary Services (AS), Black Start Generator, Black Start Generating Unit, Interim Black Start Agreement, Reliability Services Costs **Settlements & Billing:** • Pending Settlements review. Revisions will be directly based on Tariff changes.

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	May 01, 2017	✓
BPMs	BPM Changes Required	Mar 27, 2018	
RFP	Closure of Request For Proposal	Jul 31, 2017	✓
	Awards and final report	Dec 01, 2017	✓
	Posted request for proposal documents	Jun 15, 2017	✓
External BRS	Complete and Post External BRS	Nov 10, 2017	✓
Tariff	File Tariff	May 15, 2017	✓
	Tariff approval	Nov 01, 2017	✓
	Filed tariff amendment related to cost allocation	Aug 03, 2017	✓
Config Guides	Publish draft Settlements Configuration Guides	Jun 01, 2018	
Tech Spec	Create ISO Interface Spec (Tech spec)	N/A	
Market Sim	Market Simulation	N/A	
Production Activation	Settlements changes effective date	Dec 01, 2017	✓
	Settlements implementation	Oct 01, 2018	
	First Settlements cycle	Dec 03, 2018	

California ISO

Info	Details/Date
Summary	The California ISO will be deactivating Transport Layer Security (TLS) 1.0 and 1.1 in the market and performance (MAP) stage environment on date TBD 2017, and in the production environment on date TBD (based on MAP stage). Deactivating these older TLS protocol versions aligns with industry best practices for security and data integrity. It is necessary for market participants to enable TLS 1.2 as soon as possible in browsers and APIs.
Details	The ISO will deactivating TLS 1.0 and 1.1 in the MAP stage environment on date TBD 2017, and in the production environment on date (TBD based on MAP stage), and only TLS 1.2 will remain enabled. Deactivating these older TLS protocol versions aligns with industry best practices for security and data integrity. It is necessary for market participants to enable TLS 1.2 in browsers and application programming interfaces (APIs) as soon as possible in order to continue to access the MAP stage environment from date TBD onwards, and to continue to access the production environment from date TBD (based on MAP stage) onwards. Market participants can enable TLS 1.2 now as the MAP stage and production environments currently allow TLS 1.2. Note: it isn't necessary for market participants to manually disable TLS 1.0 and 1.1 in browsers and APIs because the TLS handshake will negotiate the highest mutually available version. Once TLS 1.0 and 1.1 are deactivated in the MAP stage environment, the ISO encourages market participants to confirm successful connectivity to the MAP stage portal, portal application's user interfaces (browser UIs) and APIs prior to the production environment deactivation on date TBD (based on MAP stage). Note: After TLS 1.0 and 1.1 are deactivated, market participants who cannot connect due to a version issue may receive errors depending on how they are connecting. Errors will likely include verbiage such as "wrong version", "unsupported negotiation", or "failed handshake". The Systems Access Information for Market Participants document contains the information to access the MAP stage and production environments. This document is available on the ISO website at http://www.caiso.com/Documents/SystemAccessInformation_Market Participants.pdf.
Market Notice	http://www.caiso.com/Documents/Deactiation-TransportLayerSecurityTLS10and11.html

Please refer to https://portalmap.caiso.com and market notice for updated MAP-Stage deactivation date

California ISO

2018 – OMS Nature of Work Updates

Project Info	Details/Date

Application Software Changes	OMS Nature of Work updates are required to better identify reasons for outages:
	    (1) CONTINGENCY RESERVES MANAGEMENT has been added for EIM entities
	    (2) UNIT CYCLING is changed to 'TECHNICAL LIMITATIONS NOT IN MARKET MODEL'
	
	These enumerations are added to the OMS user interface and the technical specifications. Those who wish to make use of the new Natures of Work can do so as early as November 2017. The ISO requests that participants who use the UNIT CYCLING Nature of Work migrate to the new services by February 1, 2018; however, this is a minor version change, so prior versions will continue to be supported through Fall 2018.

BPM Changes	N/A

Milestone Type	Milestone Name	Dates	Status
External BRS	External Business Requirements	Nov 2017	✓
BPMs	Post Draft BPM Changes – OM Nature of Work attributes	Nov 2017	✓
Tech Spec	Create ISO Interface Spec (Tech spec)	Nov 22, 2017 (service artifacts) Jan 2018 (Tech specs)	✓
Market Simulation	Available in MAP Stage for informal Market Sim testing	Nov 15, 2017	✓
Production Activation	New V2 version in production with backward compatibility through fall 2018	Jan 11, 2018	

California ISO

Spring 2018 - Commitment Cost Enhancements Phase 3

Project Info	Details/Date

Application Software Changes	**Scope:**
	1. Clarify use-limited registration process and documentation to determine opportunity costs
	2. Determine if the ISO can calculate opportunity costs
	   • ISO calculated; Modeled limitation Start/run hour/energy output
	   • Market Participant calculated; Negotiated limitation
	3. Clarify definition of "use-limited"; *add MSG Configuration ID to ULPDT*
	4. Change Nature of Work attributes (Outage cards)
	   • Modify use-limited reached for RAAIM Treatment
	   • Allow PDR to submit use-limit outage card for fatigue break.
	5. Market Characteristics *(to be added to GRDT)*
	   • Maximum Daily Starts
	   • Maximum MSG transitions
	   • Ramp rates
	Impacted Systems:
	1. Master File: Set use-limited resource types and limits; Set market-based values
	2. ECIC: Process use limited resource input values for and Receive opportunity cost adders from opportunity cost tool
	3. CIRA: RAAIM exempt rule for "use-limited reached"
	4. CMRI: Publish opportunity cost
	5. IFM/RTN: Use market-based values MDS, MDMT and RR
	6. SIBR: Add Opportunity cost adders on bid caps, remove daily bid RR
	7. OMS: "Use-Limited Reached" nature of work attribute for Generation Outage Card
	8. Settlements: Publish the actual start up, run hour and energy output for the use-limited resources
	9. Opportunity cost calculator (OCC): Calculate and publish opportunity costs for start-up, MLC and DEB

BPM Changes	Market Instruments, Outage Management, Reliability Requirement, Market Operations
Business Process Changes	• Manage Market & Reliability Data & Modeling • Manage Markets & Grid

Spring 2018 - Commitment Cost Enhancements Phase 3 (cont.)

Milestone Type	Milestone Name	Dates	Status
Board Approval	Board of Governors (BOG) Approval	Mar 25, 2016	✔
BPMs	Post Draft BPM changes	Feb 16, 2018	
External BRS	Post External BRS	Jan 06, 2017	✔
	Post Updated External BRS	Jul 13, 2017	✔
	Post Updated External BRS	Aug 21, 2017	✔
Tariff	Post Draft Tariff	Jul 31, 2017	✔
	Post Updated Draft Tariff (based on feedback)	Dec 5, 2017	✔
	File with FERC	Q1, 2018	
Config Guides	Config Guide	Jun 27, 2017	✔
Tech Spec	Publish ISO Interface Spec (Tech spec) – MF	Apr 03, 2017	✔
	Publish Updated ISO Interface Spec (Tech spec) – MF	Jun 30, 2017	✔
	Publish Updated ISO Interface Spec (Tech spec) – MF	Nov 30, 2017	✔
	Publish ISO Interface Spec (Tech spec) – CMRI	Apr 17, 2017	✔
	Publish Updated ISO Interface Spec (Tech spec) – CMRI	Jun 28, 2017	✔
	Publish Updated ISO Interface Spec (Tech spec) – CMRI	Oct 27, 2017	✔
Market Sim	Market Sim Start	March, 2018	
Production Deployment	Commitment Costs Phase 3 Production Deployment Deploy Opportunity Cost Calculator	May 1, 2018	
Tariff Effective Date and Production activation	Deploy and implement in the market the process to automate the validation Flexible RA Capacity per proposed tariff section 4.6.4	August 2018	
	Opportunity costs and resource characteristics changes proposed tariff effective date	November 1, 2018	

California ISO

Spring 2018– SIBR UI Upgrade

Project Info	Details/Date
Application Software Changes	**SIBR** – The CASIO will be upgrading the underlying SDK platform utilized for displaying the user interface. This latest SDK version will strengthen the security of the SIBR application and will improve compatibility with the latest version of Internet Explorer. It is anticipated no functional changes or API will be impacted by this upgrade.

Milestone Type	Milestone Name	Dates	Status
Board Approval	Board Approval	N/A	
BPMs	Publish Final Business Practice Manuals	N/A	
External BRS	Post Draft BRS	N/A	
Tariff	Receive FERC order	N/A	
Config Guides	Configuration Guide	N/A	
Tech Spec	Publish Tech Specs	N/A	
	Technical Specifications	N/A	
Market Sim	Market Sim Window	TBD	
User Guide	SIBR User Guide "Draft"	Dec 14, 2017	✓
Production Activation	SIBR WebSDK Upgrade	May 01, 2018	

California ISO

Fall 2018 Release – Overview

Fall Release Overview								
	Board Approval	**BPMs**	**External BRS**	**Tariff**	**Config Guide**	**Tech Spec**	**Market Sim**	**Production Activation**
Fall 2018 Release	**1/1/2018**	**07/02/18**	**04/06/18**	**06/15/18**	**05/18/18**	**05/18/18**	**Jul 17, 2018 - Aug 31, 2018**	**10/01/18**
Green House Gas Enhancements for EIM	12/14/17	TBD	TBD	TBD	TBD	TBD	TBD	10/01/18
Contingency Modeling Enhancements	12/14/17	TBD	02/26/18	TBD	TBD	TBD	TBD	10/01/18
Commitment Costs and Default Energy Bids Enhancements Phase 1	03/21/18	TBD	03/22/18	TBD	TBD	TBD	TBD	10/01/18
Aliso Canyon Phase 3	07/26/17	N/A	02/22/18	9/5/17	N/A	N/A	N/A	10/01/18
Settlements Performance Improvements	N/A	TBD	TBD	N/A	TBD	TBD	TBD	10/01/18
ESDER Phase 2	07/26/17	3/31/18	01/26/18	6/14/18	05/10/18	04/05/18	Aug 16, 2018 - Sep 18, 2018	10/01/18
Generator Contingency and RAS Modeling	9/19/2017	TBD	TBD	TBD	TBD	TBD	TBD	10/01/18
ADS Replacement	N/A	TBD	TBD	TBD	TBD	TBD	TBD	10/01/18
CPM Risk-of-Retirement Process Enhancements	11/2/17	N/A	TBD	N/A	N/A	N/A	N/A	10/01/18

TBD items may be inapplicable or have undetermined dates

California ISO

Fall 2018 - Green House Gas Enhancements for EIM

Project Info	Details/Date
Application Software Changes	We are seeking additional stakeholder input given the concerns with the two pass solution that have been identified. At this time, application software changes are not yet known.
BPM Changes	Market Instruments Energy Imbalance Market (EIM)

Milestone Type	Milestone Name	Dates	Status
Board Approval	Present report to BOG	Dec 14, 2017	✓
BPMs	Publish Final Business Practice Manuals	See Release Overview Slide	
External BRS	Complete External BRS & Post for MPs	See Release Overview Slide	
Tariff	Receive FERC order	See Release Overview Slide	
Config Guides	Post Configuration Guides	See Release Overview Slide	
Tech Spec	Publish Technical Specifications	See Release Overview Slide	
Market Sim	Market Sim Window	See Release Overview Slide	
Production Activation	Green House Gas Enhancements for EIM	Oct 01, 2018	

California ISO

Project Info	Details/Date

Application Software Changes	• Positions available resources so that the ISO has sufficient capability to respond to contingency events and return facilities to normal ratings within the emergency rating time frame
	• Enhances the LMP formulation to provide market price signal related to this reliability constraint
	• Creates a Locational Marginal Capacity Price (LMCP) which reflects:
	    • A resource's opportunity costs
	    • Marginal congestion cost savings, and/or
	    • The marginal capacity value to follow dispatch
	Systems:
	• ADS - Modified to display corrective capacity awards similar to AS
	• CMRI - New or modified reports to display LMCP prices and awards
	• IFM/RTM - Model new capacity awards and Locational Marginal Capacity Price (LMCP).
	• Integration
	• OASIS - New or modified reports to display LMCP prices and awards
	• Settlements

BPM Changes	Market Operations, Market Instruments, Definitions and Acronyms, Settlements and Billing
Business Process Changes	TBD

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Dec 14, 2017	✓
BPMs	Publish Final Business Practice Manuals	See Release Overview Slide	
External BRS	Complete and Post External BRS	2/26/2018	
Tariff	File Tariff	See Release Overview Slide	
Config Guides	Design review - BPM and Tariff SMEs	See Release Overview Slide	
Tech Spec	Create ISO Interface Spec (Tech spec)	See Release Overview Slide	
Market Sim	Market Sim Window	See Release Overview Slide	
Production Activation	CME -Transmission	Oct 01, 2018	

California ISO

Project Info	Details/Date
Application Software Changes	**Scope:** Suppliers are requesting the flexibility to reflect unique costs and volatility: • Support integration of renewable resources through incentivizing flexible resources participation during tight fuel supply • Account for costs of flexible resources (gas and non-gas) to reduce risk of insufficient cost recovery • Encourage participation of non-RA and voluntary EIM resources; compliance with FERC Order 831 • Requires supporting verified costs of energy bids above $1,000/MWh **Impacted Systems:** 1. MQS/PCA: insert cost based generated commitment cost (CC) when resource committed but CC supplied by market, locking rule, static list of critical non-competitive constraints 2. SIBR, ECIC: negotiated reference level prices, automate Ex Ante adjustments, commitment cost caps as configurable percentages, ability to calculate energy cost reference, minimum cost, start-up cost, and transition cost reference levels using reasonable thresholds 3. IFM/RTM: recalibrate the penalty price parameters, adjust pricing run to reflect merit order, $2,000/MWh cap for calculating LMP 4. IFM/RTM, CMRI, EDR, Integration: use new DCPA to designate path competitiveness for critical constraints, identify commitment costs that need to be mitigated 5. IFM/RTM, Portal, EDR: identify MOC for reactive power and voltage support
BPM Changes	• Market Instruments • Market Operations
Business Process Changes	• Maintain Major Maintenance Adders (MMG LIII) • Maintain Negotiated Default Energy Bids (MMG LIII) • Maintain Negotiated O_Ms (MMG LIII) • Manage Day Ahead Market (MMG LII) • Manage Market Billing Settlements (MOS LII) • Manage Real Time Hourly Market (RTPD) (MMG LII) • Manage Real Time Operations – Maintain Balance Area (MMG LII)

California ISO

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	3/21/18	
BPMs	Draft BPM changes	See Release Overview Slide	
	Post Draft BPM changes	See Release Overview Slide	
	Publish Final Business Practice Manuals	See Release Overview Slide	
External BRS	Complete and Post External BRS	Mar 22, 2018	
Tariff	File Tariff	See Release Overview Slide	
	Receive FERC order	See Release Overview Slide	
Config Guides	Design review - BPM and Tariff SMEs	See Release Overview Slide	
Tech Spec	Create ISO Interface Spec (Tech spec)	See Release Overview Slide	
Market Sim	Market Sim Window	See Release Overview Slide	
Production Activation	CCDEBE Phase 1	Oct 01, 2018	

California ISO

Fall 2018 – Aliso Canyon Phase 3

Project Info	Details/Date
Application Software Changes	**Scope:** **IFM/RTM:** Optimize the counter flow solution for the supplied counter flow (SCF and withheld capacity (WC) EQUATIONS. **ECIC:** Adjustment of real-time scalar. Will need user interface for real time adjustments. **SMDM:** Incorporate the heat rate specific to the bid curve output by the market process.
BPM Changes	• Market Operations • Energy Imbalance Market (EIM) • Managing Full Network Model
Business Process Changes	To Be Determined

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Jul 27, 2017	✓
BPMs	Draft BPM changes	N/A	
	Post Draft BPM changes	N/A	
	Publish Final Business Practice Manuals	N/A	
External BRS	Complete and Post External BRS	Feb 22, 2018	
Tariff	File Tariff	Sep 05, 2017	✓
	Receive FERC order	Nov 28, 2017	✓
	Pre-Tariff Filing QRB (Emergency)	Nov 30, 2017	✓
	Receive FERC order (Emergency)	Dec 15, 2017	✓
Config Guides	Design review - BPM and Tariff SMEs	N/A	
Tech Spec	Create ISO Interface Spec (Tech spec)	N/A	
Market Sim	Market Sim Window	N/A	
Production Activation	Aliso Canyon Phase 3	Oct 01, 2018	

California ISO

Fall 2018 – Settlement Performance Improvements

Project Info	Details/Date

Application Software Changes	The scope of the Settlements Performance Improvements include:
	• Performance improvements for Post Bill Determinant Mapping process - Non-production storage issue causing delays to the statement publication
	• Performance improvements of Statement Generation (BD File Size issue):
	    Daily Statements generation
	    Monthly Statements and Invoice generation
	Systems: Settlements

BPM Changes	Settlements and Billing
Business Process Changes	Settlements & Billing: Application Flow should be reviewed for possible changes

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	N/A	
BPMs	Publish Final Business Practice Manuals	See Release Overview Slide	
External BRS	Complete and Post External BRS	See Release Overview Slide	
Tariff	Receive FERC order	N/A	
Config Guides	Design review - BPM and Tariff SMEs	See Release Overview Slide	
Tech Spec	Create ISO Interface Spec (Tech spec)	See Release Overview Slide	
Market Sim	Market Sim Window	See Release Overview Slide	
Production Activation	Settlements Performance Improvements	Oct 01, 2018	

California ISO

Project Info	Details/Date

Application Software Changes	**Settlements:**
	• Alternative Baselines:
	    • Possible system changes to include addition of an automated monitoring tool for performance measurement data received from external participants.
	    • Changes to the DRRS registration system for the selection of the new baselines and allowing for ISO approval prior to use in the market.
	    • Settlement configuration will need to be evaluated and revised to assure PDRs that provide AS services can be calculated correctly based on the submitted SQMD.
	ECIC:
	• EIM Net Benefits Testing:
	    • Code modification to calculation to accommodate addition of all applicable gas price indices.
	MRI-S:
	• Alternative Baselines:
	    • The DRS Decommissioning project seeks to retire the current DRS system. Once this system is retired all current functionality will reside in the MRI-S (Market Results Interface – Settlements) system. It should be noted that all available customer load baseline calculations will be submitted into the MRI-S system once the DRS system is retired.

BPM Changes	**Market Instruments:**
	• EIM Net Benefits Testing:
	    • Changes will include addition of all gas price indices used in calculation.
	Metering:
	• Alternative Baselines:
	    • Need to revise the BPM to explain new baselines and changes to existing systems.
	• Station Power:
	    • Need to revise BPM to provide examples of wholesale/retail uses for generation and storage
	    • Need to revise BPM to clarify permitted/prohibited netting rules.
	Definitions & Acronyms:
	• Station Power:
	    • Revision of Station Power definition to match Tariff language.
	Settlements & Billing:
	• Alternative Baselines:
	    • Possible changes to reflect settlements configuration changes.

California ISO

Fall 2018 - ESDER Phase 2

Project Info	Details/Date
Business Process Changes	• Develop Infrastructure (DI) (80001) • Manage Market & Reliability Data & Modeling (MMR) (80004) • Manage Operations Support & Settlements (MOS) (80007) • Support Business Services (SBS) (80009) • Other

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Jul 26, 2017	✓
BPMs	Post Draft BPM changes	May 31, 2018	
	Publish Final Business Practice Manuals	Aug 13, 2018	
External BRS	Post External BRS	Oct 17, 2017	✓
	Post Revised External BRS	Jan 26, 2018	
Tariff	Post Draft Tariff	Nov 17, 2017	✓
	File Tariff with FERC	Jun 14, 2018	
	Post Updated Draft Tariff (based on feedback)	Feb 05, 2018	
CPG	Next CPG Meeting	Jan 29, 2018	
Config Guides	Config Guides	May 10, 2018	
Tech Spec	Publish ISO Interface Spec (Tech spec)	Apr 05, 2018	
Market Sim	Market Sim Window	Aug 16, 2018 - Sep 18, 2018	
Production Activation	ESDER Phase 2	Oct 01, 2018	

Project Info	Details/Date

Application Software Changes	• Enhance the Security Constrained Economic Dispatch
	    • Model generation/load loss in the dispatch
	    • Model transmission loss along and generation/load loss due to RAS operation dispatch
	    • Model transmission reconfiguration due to RAS operation in the dispatch
	• Update the congestion component of LMP so that it considers the cost of positioning the system to account for generator contingencies and RAS operations
	• Enhance DAM, RTM and EIM to support generator contingencies
	Impacted systems:
	• IFM/RTM, CRR, MF

BPM Changes	• Managing Full Network Model • CRR • Market Operations • Settlements and Billing • EIM
Business Process Changes	• Manage Congestion Revenue Rights (MMR LII) • Manage Real Time Operations - Transmission & Electric System (MMG LII)

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	9/19/2017	✓
External BRS	Complete and Post External BRS	See Release Overview Slide	
Tariff	Receive FERC order	See Release Overview Slide	
Config Guides	Design review - BPM and Tariff SMEs	N/A	
Tech Spec	Create ISO Interface Spec (Tech spec)	See Release Overview Slide	
Market Sim	Market Sim Window	See Release Overview Slide	
Production Activation	Generator Contingency and RAS Modeling	Oct 01, 2018	

California ISO

Fall 2018 Release – ADS User Interface Replacement

Project Info	Details/Date
Application Software Changes	• Transition our web-based user interface standard to eliminate the need to install at the customer site.
BPM Changes	To Be Determined
Business Process Changes	To Be Determined

Milestone Type	Milestone Name	Dates	Status
Board Approval	Board Approval	N/A	
BPMs	Publish Final Business Practice Manuals	See Release Overview Slide	
External BRS	Post Draft BRS	See Release Overview Slide	
Tariff	Receive FERC order	See Release Overview Slide	
Config Guides	Configuration Guide	N/A	
Tech Spec	Publish Tech Specs	See Release Overview Slide	
	Technical Specifications	See Release Overview Slide	
Market Sim	Market Sim Window	See Release Overview Slide	
Production Activation	Production Deployment Date	See Release Overview Slide	

Fall 2018 – CPM Risk-of-Retirement Process Enhancements

Project Info	Details/Date
Application Software Changes	Impacted systems: RA System Access Provisioning (AIM)
BPM Changes	To Be Determined
Business Process Changes	To Be Determined

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Nov 02, 2017	✓
BPMs	Publish Final Business Practice Manuals	See Release Overview Slide	
External BRS	Complete and Post External BRS	See Release Overview Slide	
Tariff	File Tariff	See Release Overview Slide	
Config Guides	Design review - BPM and Tariff SMEs	See Release Overview Slide	
Tech Spec	Create ISO Interface Spec (Tech spec)	See Release Overview Slide	
Market Sim	Market Sim Window	See Release Overview Slide	
Production Activation	CPM Risk-of-Retirement	Oct 01, 2018	

California ISO

Spring 2019 – EIM BANC/SMUD

Project Info	Details/Date
Application Software Changes	Implementation of SMUD as an EIM Entity.
BPM Changes	EIM BPM will be updated if needed to reflect new modeling scenarios identified during implementation and feedback from SMUD.
Market Simulation	December 3, 2018 – January 31, 2019
Parallel Operations	February 1, 2019 – March 30, 2019

Milestone Type	Milestone Name	Dates	Status
Tariff	File Readiness Certification	Mar 2, 2019	
Market Sim	Market Sim Window	Dec 03, 2018 - Jan 31, 2019	
Parallel Operations	Parallel Operations Window	Feb 01, 2019 - Mar 30, 2019	
Production Activation	EIM – BANC/SMUD	Apr 01, 2019	

California ISO

Spring 2019 – EIM LADWP

Project Info	Details/Date
Application Software Changes	Implementation of LADWP as an EIM Entity.
BPM Changes	EIM BPM will be updated if needed to reflect new modeling scenarios identified during implementation and feedback from LADWP.
Market Simulation	December 3, 201 8 – January 31, 2019
Parallel Operations	February 1, 2019 – March 30, 2019

Milestone Type	Milestone Name	Dates	Status
Tariff	File Readiness Certification	March 1, 2019	
Market Sim	Market Sim Window	Dec 03, 2018 - Jan 31, 2019	
Parallel Operations	Parallel Operations Window	Feb 01, 2019 - Mar 30, 2019	
Production Activation	EIM - LADWP	Apr 01, 2019	

California ISO

Market Status Information in MPP

In MPP, there is a tab under "Market Operations" for "Market Status"

Market status information is published for DA, HA and RT markets

HA & RT market status information includes status for Bids & Schedules as well as ISTs

The proposal is to move this under the System Operating Messages in OASIS

Screenshot of MPP showing market status information

Screenshot of OASIS System Operating Messages

System Operating Message Display - OASISUI Prod - PUBLIC - 1 - Internet Explorer

Timestamp	System Operating Messages
10/09/2017 13:18:39	There has been a change to the OTCs on the ELDORADO_ITC and PALOVRDE_ITC XXXX_BG branch group on 10/9/2017. Check OASIS for updates. From the California ISO OASIS select the (Transmission) tab and select the Report (Current Transmission Usage) for the current values
10/07/2017 08:43:28	Effective immediately there has been a change to the OTCs on the SUMMIT_ITC branch group for 10/8/17. Check OASIS for updates.
10/06/2017 14:07:52	Effective immediately there has been a change to the OTC's on the ELDORADO_ITC PALOVRDE_ITC WSTWGMEAD_ITC & NORTHGILA500_BG branch groups for 10/7/17. Check OASIS for updates.
10/06/2017 12:21:35	Effective immediately there has been a change to the OTC's on the BLYTHE_BG for 10/6/17. The ISO will update you on any changes in transmission line rating status.
10/06/2017 11:14:16	Effective immediately there has been a change to the OTC's on the ELDORADO_ITC PALOVRDE_ITC tie WSTWGMEAD_ITC and NORTHGILA500_BG for 10/6/17. The ISO will update you on any changes in transmission line rating status.
10/06/2017 07:57:19	Effective immediately there has been a change to the OTC's on the BLYTHE_BG for 10/6/17. The ISO will update you on any changes in transmission line rating status.
10/06/2017 07:28:12	Effective immediately there has been a change to the OTC's on the BLYTHE_BG for 10/6/17. The ISO will update you on any changes in transmission line rating status.
10/05/2017 18:21:15	Effective Immediately the Path 59 was changed from for HE 19 on 10/5/17 through HE 06 on 10/6/17. The ISO will update you on any changes in transmission line rating status.
10/05/2017 18:10:23	Effective immediately there has been a change to the OTC's on the Adelanto-SP_ITC branch group for 10/05/17. Check OASIS for updates.
10/05/2017 15:11:17	CAISO Issues with Bids and Schedules submission to the Hour Ahead and Real Time Market Have been RESOLVED. Inquiries please contact the Day Ahead Desk.
10/05/2017 14:22:23	CAISO is experiencing Issues with Bids and Schedules submission to the Hour Ahead and Real Time Market. Critical systems team is currently troubleshooting issue. Sent by Market Operations. Inquiries please contact the Day Ahead Desk.
10/05/2017 13:28:26	The Final Day Ahead Results were published at 13:11 for 10/06/2017. Note that Final Day Ahead Results for 10/06/2017 are expected to be publish by 13:00 as outlined in the CAISO Tariff. Sent by Market Operations. Inquiries please contact the Day Ahead Desk.
10/05/2017 12:55:40	Final Day Ahead Results for trade date 10/06/2017 that are normally published before 13:00 PPT today 10/05/2017 will be delayed. The Final Day Ahead Results for trade date 10/06/2017 are expected to be published by 13:30 for 10/06/2017. ISO estimates that this variation in the publishing time to apply only to the results for the 10/06/2017 trade date.
10/04/2017 19:58:22	Effective immediately there has been a change to the OTCs on the BLYTHE_BG branch group for 10/04/17 and 10/05/17. Check OASIS for updates. From the California ISO OASIS select the (Transmission) tab and select the Report (Current Transmission Usage) for the current values.
10/04/2017 17:38:54	The California ISO has URGENT maintenance in its IFM/RTN production environment today [9/12/2017 @ 18:00PPT]. RTN 5-min and RTPD 15-min dispatches are not expected to be interrupted. Contact the ISO Service Desk with any questions. 916-351-2390.

California ISO

How to get to System Operating Messages

- Link in MPP

- Link in OASIS

Retention of Advisory Market Schedules

- Currently data is available for current trade date and seven days in the past

- Propose to change this to current trade date and three days in the past

- Usage analysis shows that this data is not heavily used by market participants

- This data set is advisory and is superseded by the binding values

- Keeping four days will help with performance improvement and efficiency in data storage

# Retention of Advisory Market Schedules

- Following CMRI UI reports will return data for the current date and three days in the past:

  - Two DA RUC Advisory Schedules

  - RTUC Advisory Schedules

  - RTD Advisory Schedules

- Request for Retrieve Market Schedules API with bindingFlag = N (for advisory market schedules) will only return data for the current date and three days in the past

- **Production Implementation**
  - 12/1/2017

Data Retention for CMRI, OASIS and ADS

- Proposal to keep only 39 months worth of data in these three applications

- Data beyond 39 months will no longer be available

- This will align with the Settlement cycle of 36 months

- Data will be rolled off on a monthly basis after 39 months

- This will help with stability and performance of the applications

- **Production Implementation**
    12/1/2017

RequestMeterData XSD – Minor change

- Change in cardinality to request multiple resource IDs within the same MeterDataRequest
- Current XSD allows for one resource ID per MeterDataRequest class, thereby causing multiple queries against the database.
- This change will make the database call more efficient
- Sample XML in the next slide

California ISO
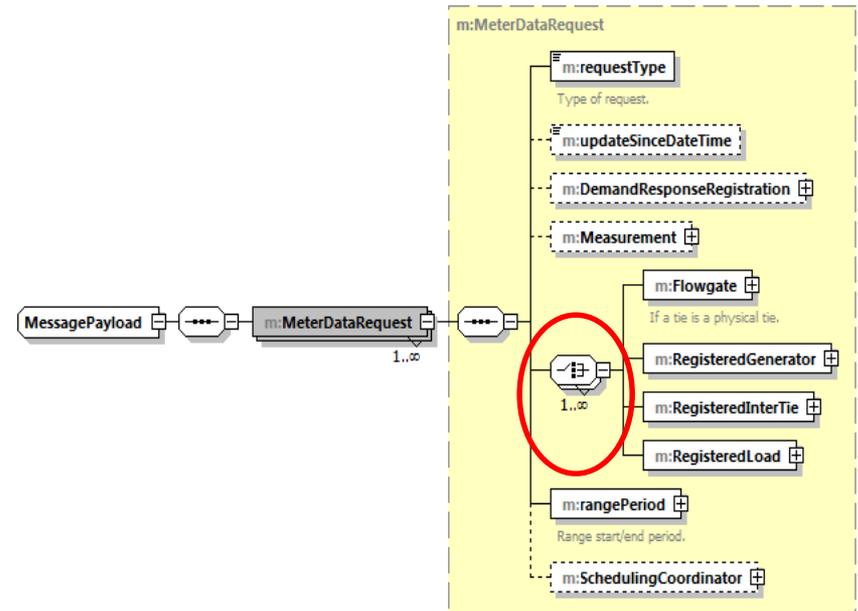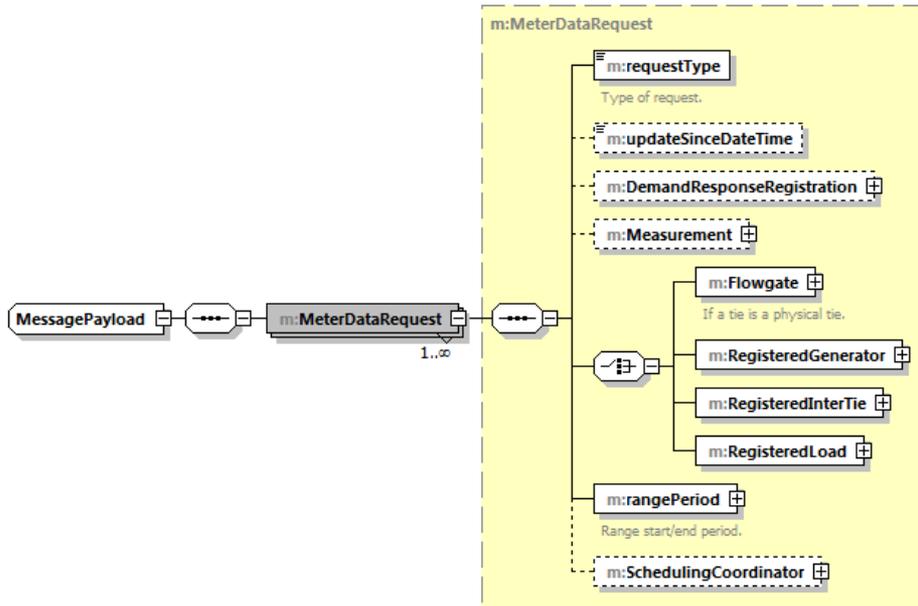
RequestMeterData XSD – Minor change

Description	Technical Document & Artifacts Package	MAP Stage Deployment	Production Deployment
Change in cardinality to request multiple resource IDs in the same MeterDataRequest class	11/01/2017	11/15/2017	11/20/2017

California ISO