California ISO

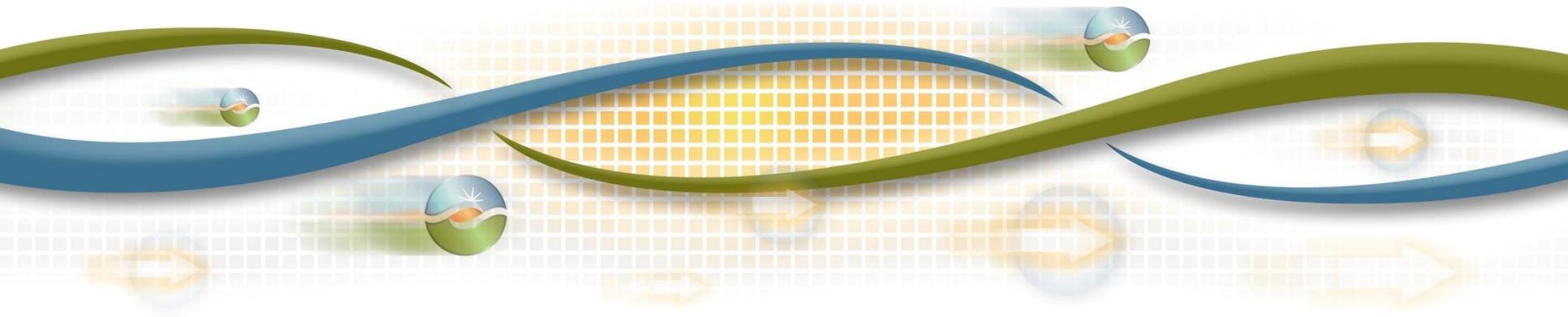# Release User Group Agenda

August 1st, 2017   *10:00 a.m.–11:00 a.m.* (Pacific Time)

Web Conference Information	Conference Call Information
URL: https://www.connectmeeting.att.com Meeting Number: 8665282256 Access Code: 5251941	Domestic Call In: (866) 528-2256 International Call In: (216) 706-7052 Access Code: 5251941

Release User Group Agenda

August 1st, 2017   *10:00 a.m. – 11:00 a.m. (Pacific Time)*

Time	Topic	Facilitator
10:00 – 10:05	Agenda & ISO Roll call	Janet Morris
10:05 – 10:45	Release Plan	Adrian Chiosea Brett Bruderer Michael Lucas 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

The ISO offers innovative training programs

Date	Training*
Aug 16	Settlements 101
Aug 17	Settlements 201
Oct 5	Welcome to the ISO - webinar
Oct 11-12	Get to Know the ISO

*All classes are offered at our Folsom, CA location unless noted otherwise.

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

Training calendar - http://www.caiso.com/participate/Pages/Training/default.aspx
Contact us - CustomerTraining@caiso.com
EIM computer based training courses: https://www.westerneim.com/Pages/Resources.aspx

Release Plan 2017 - 2018

Independent 2017
- RIMS Functional Enhancements
- Black Start and System Restoration Phase 2
- Support for Imperial Valley Phase Shifter
- CMRI Access Control Level Enhancement

Fall 2017 (11/1/17)
- EIM Portland General Electric (PGE) – 10/1/17
- Bidding Rules Enhancements – Part B
- EIM 2017 Enhancements
- Gas Burn Report
- SIBR UI Upgrade
- RAAIM Implementation Update

Winter 2017 / Spring 2018
- EIM Winter 2017 Enhancements
- Energy Storage and DER Phase 1C
- EIM 2018 Idaho Power Company
- EIM 2018 Powerex
- Reliability Services Initiative 2017
- Commitment Cost Enhancement Phase 3
- Energy Storage and DER Phase 2 and DRS Replacement
- EIM greenhouse gas compliance
- Capacity Procurement Mechanism – risk-of-retirement (no system changes expected)

Release Plan – 2018 and subject to further planning

Fall 2018 – tentative, subject to impact assessment
- Contingency Modeling Enhancements
- FERC 831 and Commitment Costs and Default Energy Bid Enhancements
- Consolidated Energy Imbalance Market Initiatives
- ADS User Interface Replacement
- CIRA Technology Upgrade
- Temporary Shutdown of Resource Operations
- Aliso Canyon Phase 3

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

Fall 2019 – tentative, subject to impact assessment
- Generation Contingency and Remedial Action Scheme
- Frequency Response Phase 2
- Congestion Revenue Right auction efficiency
- Flexible Resource Adequacy Criteria and Must-offer Obligation Phase 2
- Real-Time Market Enhancements
- Transmission Access Charge billing structure

Spring 2020
- EIM 2020 Salt River Project

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2017 – RIMS Functional Enhancements

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 reqired	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	
Production Activation	RIMS5 App & Study	Mar 21, 2016	✓
	RIMS 5 Queue Management, Transmission & Generation	Dec 14, 2017	

2017- 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	Board approval	May 1, 2017	✔
BPMs	BPM Changes Required	TBD	
External BRS	External BRS not Required	N/A	
Tariff	Draft tariff - Web Conference to finalize tariff	May 1, 2017 May 15, 2017	✔ ✔
Request for Proposal (RFP)	Posted request for proposal documents	June 15, 2017	✔
RFP bids	Closure of RFP	July 31, 2017	
Production	Awards and final report	December 1, 2017	

Project Info	Details/Date
Application Software Changes	**Allow Market control the Phase Shifter (PST) and manage the power flow** **MF**: No MF system changes, only data changes to: define PST ID, tap max/min number, tap position change limit, parallel PST set **EMS**: Send the market optimized PST tap position to PST device operator through EMS for binding interval at the binding interval time stamp **DAM/RTM:** provide configuration option for PST optimization for each market Set Tap position as Integer Control Variable Include PST tap position movement from initial position impact on transmission flow constraint Enforce limits on tap position, enforce constraint for tap position movement Enforce constraint for Phase shifter's designated as parallel must be optimized at same tap position Publish Tap position for PST
BPM Changes	Market Operations

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	N/A	
BPMs	Draft BPM changes	August 11, 2017	
	Post Draft BPM changes	August 18, 2017	
External BRS	External Business Requirements	August 4, 2017	
Tariff	File Tariff	N/A	
	Receive FERC order	N/A	
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		October 4, 2017	

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2017 – CMRI ACL

Project Info	Details/Date
Application Software Changes	**CMRI ACL** – New reporting functionality to provide third-party, the ability to allow CMRI certificate provisioning to be designated on a resource level (commonly referred to as Access Control Level - ACL functionality) rather than on an SCID level. This would allow any SC to provide CMRI access to third party users for specific resources. Reference materials: AIM User Guide and ACL function training at http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=EBFDD87D-9926-4BFE-8DBD-09AA3D1E5CC5

Milestone Type	Milestone Name	Dates	Status
Board Approval	Board Approval	N/A	
BPMs	Create BPMs	N/A	
External BRS	Post External BRS	N/A	
Tariff	Tariff Filing Activities	N/A	
Config Guides	Settlements Configuration	N/A	
Tech Spec	Post Technical Specifications	N/A	
Production Activation	CMRI Access Control Resource Level	TBD	

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Fall 2017 – EIM Portland General Electric

Project Info	Details/Date
Application Software Changes	Implementation of Portland General Electric as an EIM Entity.
BPM Changes	EIM BPM will be updated to reflect new modeling scenarios identified during PGE implementation and feedback from PGE.
Market Simulation	Market Simulation unstructured scenarios were executed successfully. Structured scenarios are 93% complete and expected to be at 100% this week.
Parallel Operations	August 1 – September 30, 2017

Milestone Type	Milestone Name	Dates	Status
Tariff	File Readiness Certification	Aug 31, 2017	
Market Sim	Market Sim Window	Jun 6, 2017 – Jul 6, 2017	✓
Parallel Operations	Parallel Operations Window	Aug 1, 2017 – Sep 30, 2017	
Production Activation	EIM - Portland General Electric	Oct 01, 2017	

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Project Info	Details/Date

Application Software Changes	• **Master File:**
	  • Electric Region added to GRDT as non-modifiable
	
	• **CMRI:**
	  • Resource-level monthly EPI (calculated on daily basis) based on wholesale or retail electric region type.
	
	• **CAISO.COM:**
	  • Only publish total monthly fuel region GPI (existing) and eliminate publishing the monthly fuel region GPI components as PDF file. (public information)

Business Process Change	• Manage Transmission & Resource Implementation • Manage Entity & Resource Maintenance Updates • Manage Full Network Model Maintenance
BPMs	Market Instruments

Milestone Type	Milestone Name	Dates	Status
Board Approval	Board of Governors (BOG) Approval	Mar 25, 2016	✓
External BRS	Post External BRS	Jan 13, 2017	✓
BPMs	Post Draft BPM changes	Aug 16, 2017	
Configuration Guides	Prepare Draft Configuration Guides	N/A	
Tech Spec	Publish MF Tech Specs Publish updated MF Tech Specs	Apr 03, 2017 Jun 30, 2017	✓ ✓
	Publish CMRI Tech Specs Publish updated CMRI Tech Specs	Apr 25, 2017 Jun 28, 2017	✓ ✓
Market Simulation	Market Simulation window	Sept 6, 2017 – Sept 29, 2016	
Production Activation	Bidding Rules Part B	Nov 01, 2017	

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Fall 2017 – EIM Enhancements 2017

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. EIM software enhancements 4. Change to ETSR formulation to separate base energy transfer to distinct non-optimizable ETSRs. *Out of Scope:* 1. BAAOP provisioning in AIM 2. Joint Owned Unit/Shared BAA Resource Modeling
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

Fall 2017 – EIM Enhancements 2017

Milestone Type	Milestone Name	Dates	Status
External BRS	Post External BRS	Jan 23, 2017	✓
	Post Updated (v1.2) External BRS to public site	Apr 10, 2017	✓
Tech Spec	Publish Technical Specifications (Master File)	Apr 10, 2017	✓
	Publish Updated Technical Specifications (Master File)	Jun 30, 2017	✓
	Publish Technical Specifications (OASIS)	Apr 07, 2017	✓
	Publish Updated Technical Specifications (OASIS)	Jun 23, 2017	✓
	Publish Technical Specifications (CMRI)	Apr 26, 2017	✓
	Publish Updated Technical Specifications (CMRI)	Jun 28, 2017	✓
Configuration Guides	Post Configuration Guides	June 27, 2017	✓
BPMs	Post Draft BPM changes	August 15, 2017	
Market Sim	Market Sim Window	Sep 6, 2017 – Sept 29, 2017	
Production Activation	EIM Enhancements 2017	Nov 01, 2017	

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Fall 2017 – Gas Burn Report

Project Info	Details/Date
Application Software Changes	**CMRI** - implement ISO Market software functionality to calculate and present gas burn estimates to gas companies serving electric generation located within the CAISO BAA **OASIS** - Control Area Generating Capability List report
Business Process Change	• Develop Infrastructure • Manage Market & Reliability Data & Modeling

Milestone Type	Milestone Name	Dates	Status
Board Approval	BOG Approval	N/A	
BPMs	Post Draft BPM changes	N/A	
External BRS	External Business Requirements	Jul 29, 2016	✓
Tariff	Receive FERC order	N/A	
Config Guides	Configuration Guides	N/A	
Tech Spec	Publish Technical Specifications - CMRI	Apr 26, 2017	✓
	Publish Updated Technical Specifications - CMRI	Jun 28, 2017	✓
	Publish Technical Specifications - OASIS	May 03, 2017	✓
	Publish Updated Technical Specifications - OASIS	Jun 23, 2017	✓
Market Sim	Market Sim Window	N/A	
Production Activation	GenDB MF Consol and Gas Burn Report	Nov 01, 2017	

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Fall 2017 – 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	
MAP Stage	System available in MAP Stage	Sep 18, 2017 - Sep 29, 2017	
Production Activation	SIBR UI Upgrade	Nov 01, 2017	

Fall 2017 – RAAIM Implementation Update

Project Info	Details/Date
Application Software Changes	**RAAIM (Resource Adequacy Availability Incentive Mechanism)** – California ISO intends to file a petition with the Federal Energy Regulatory Commission for limited tariff waiver of CAISO tariff section 40.9.6 to forego assessing any RAAIM charges for the period April 1, 2017 through December 31, 2017. California ISO proposes to include updated charge codes for RAAIM with the 2017 Fall Release that would become financially binding on January 1, 2018. This would provide market participants with a two month period to review their settlement statements and assess the application of RAAIM before becoming it becomes financially binding.

Milestone Type	Milestone Name	Dates	Status
Tariff	File petition with FERC	TBD	
	Receive FERC decision (anticipated date)	TBD	
Penalties and Incentives	Reverse out all RAAIM penalties and incentives	April 1, 2017 – Dec 31, 2017	
Configuration Guides	Update Configuration Guide	TBD	
External Validation	Validation using production data with the new calculation	TBD	
Production Deployment	Implement and deploy into Production in advisory mode revised charge codes	Nov 1, 2017	
Review Period	Financially non-binding review period for settlement statements based on revised charge codes and to assess the application of RAAIM before becoming financially binding	Nov 1, 2017 – Dec 31, 2017	
Production Activation	New charge codes – revised RAAIM penalties and incentives become financially binding	Jan 1, 2018	

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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 Settlements & Billing

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	TBD	
BPMs	Draft BPM changes	TBD	
	Post Draft BPM changes	TBD	
	Publish Final Business Practice Manuals	TBD	
External BRS	External Business Requirements	August 1, 2017	
Tariff	File Tariff	TBD	
	Receive FERC order	TBD	
Config Guides	Design review - BPM and Tariff SMEs	10/1/2017	
Tech Spec	Create ISO Interface Spec (Tech spec)	10/1/2017	
Market Sim	Market Sim Window	12/1/2107 – 1/31/2018	
Production Activation	EIM Enhancements Winter 2017	Feb 13, 2018	

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"
	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
	   • 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

Milestone Type	Milestone Name	Dates	Status
Board Approval	Board of Governors (BOG) Approval	Mar 25, 2016	✓
BPMs	Post Draft BPM changes	TBD	
External BRS	Post External BRS	Jan 06, 2017	✓
	Post Updated External BRS	Jul 13, 2017	✓
Tariff	Post Draft Tariff	Jul 31, 2017	✓
	File with FERC	TBD	
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 ISO Interface Spec (Tech spec) – CMRI	Apr 17, 2017	✓
	Publish Updated ISO Interface Spec (Tech spec) – CMRI	Jun 28, 2017	✓
Market Sim	Market Sim Window	Dec 1, 2017	
Production Activation	Commitment Costs Phase 3	Feb 13, 2018	

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Project Info	Details/Date
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/derate in the market
BPM Changes	Market Operations Energy Imbalance Market Settlements and Billing

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	TBD	
BPMs	Draft BPM changes	TBD	
	Post Draft BPM changes	TBD	
External BRS	External Business Requirements	July 31, 2017	
Tariff	File Tariff	TBD	
	Receive FERC order	TBD	
Config Guides	Design review - BPM and Tariff SMEs	10/1/2017	
Tech Spec	Create ISO Interface Spec (Tech spec)	10/1/2017	
Market Sim	Market Sim Window	12/1/2107 – 1/31/2018	
Production Activation	EIM Enhancements Winter 2017	Feb 13, 2018	

California ISO

Spring 2018 – 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 ISO approved the Idaho Power network model and continues to make progress integrating the Idaho model into the ISO non-production environment in preparation for integration testing.
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 - Idaho Power	Apr 04, 2018	

California ISO

Spring 2018 – 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 ISO and Powerex have developed a plan for integrating incremental changes into the ISO full network model in preparation for integration testing.
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	

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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 could potentially impact the RAAIM 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

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Spring 2018 - 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 15, 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	Q3 2017	
Config Guides	Config Guide	Jun 23, 2017	✓
Tech Spec	Publish Technical Specifications	Apr 03, 2017	✓
Market Sim	Market Simulation	Dec 19, 2017 - Jan 25, 2018	
Production Deployment	Production Deployment	Feb 13, 2018	
Production Activation	Production Activation	Apr 01, 2018	

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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.

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Spring 2018 - ESDER2 & DRS Decommissioning

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	Board Approval	July 26-27, 2017	
BPMs	Create BPMs	TBD	
External BRS	Post External BRS	TBD	
Tariff	Tariff Filing Activities	TBD	
Config Guides	Settlements Configuration	TBD	
Tech Spec	Post Technical Specifications	TBD	
Market Simulation	Market Simulation		
Production Activation	Production Activation	5/1/2018	

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Project Info	Details/Date
Application Software Changes	The GHG allocation is limited to the dispatch the amount of between Pmax and an economic dispatch reference as "GHG allocation base" The problem is solved in two passes. **SIBR**: Support an hourly California Supply Y/N indicator as part of the GHG Bid Component for EIM Participating Resources **RTM**: Build an activation flag allow operator to turn on/off GHG two pass solution *Pass 1 settings and simplification:* • For EIM Participating Resources with California Supply = N: In RTPD, Set the GHG bid capacity $G_{GHGi} = 0$ and the GHG allocation base $\bar{G}_i = 0$. In RTD, set GHG allocation base $\bar{G}_i = 0$ use GHG bid capacity G_{GHGi} • For California Supply = Y, GHG bid capacity G_{GHGi} from the Clean Bid shall be used and the GHG allocation base $\bar{G}_i$ shall be set to the corresponding base schedule *Pass 2 GHG allocation limited by the GHG bid capacity, the optimal dispatch, and the difference between the upper economic limit and the GHG allocation reference calculated in the first pass for non-CA supply* **CMRI:** Publish the GHG allocation reference
BPM Changes	Energy Imbalance Market

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Q1 2018	
BPMs	Draft BPM changes	TBD	
	Post Draft BPM changes	TBD	
External BRS	External Business Requirements	August 2017	
Tariff	File Tariff	TBD	
	Receive FERC order	TBD	
Config Guides	Design review - BPM and Tariff SMEs	TBD	
Tech Spec	Create ISO Interface Spec (Tech spec)	TBD	
Market Sim	Report on GHG Attribution Accuracy	Q4 2017	
Production Activation		Spring 2018	

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