Release User Group Agenda

April 21st, 2020   *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
Calls and webinars are recorded for stakeholder convenience, allowing those who are unable to attend to listen to the recordings after the meetings. The recordings will be publicly available on the ISO web page for a limited time following the meetings. The recordings, and any related transcriptions, should not be reprinted without the ISO's permission.	

Release User Group Agenda

April 21st, 2020   *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	Janet Morris Trang Vo Rashele Wiltzius Jeremy Malekos

California ISO

The ISO offers innovative training programs

Date	Training courses and workshops
June 10 - 11	SC Certification Training
	Email us at CustomerReadiness@caiso.com for any training or readiness related questions

CustomerReadiness@caiso.com

Computer Based Training	
There are more than 20 computer based training modules on the ISO website covering:	
• Markets and Operations	• Settlements and Metering
• Reference Materials	• Western Energy Imbalance Market

New Modules (recorded webinar and slides)

You can find new initiatives training courses on the learning center web page below.
More resources will be added throughout 2020 in accordance with project schedules.

Visit our **Learning Center** web page to access our training calendar, register for courses and find other informational resources:
http://www.caiso.com/participate/Pages/LearningCenter/default.aspx

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Release Plan Summary: 2020

Independent 2020

- Congestion Revenue Rights (CRR) Data Transparency Enhancements – In Production
- Capacity Procurement Mechanism Soft Offer Cap
- *Settlements Spring 2020 Release – refer to Settlement User Group*
  - *Black Start System Restoration Phase 2*
  - *Reliability Coordinator Settlement Enhancements*
- Nodal Pricing Model – Advisory Service for PacifiCorp

Fall 2020

- Commitment Costs and Default Energy Bid Enhancements Phase 1
- Energy Storage and Distributed Energy Resources Phase 3B
- Dispatch Operating Target Tariff Clarifications
- Intertie Deviation Settlement
- Excess Behind the Meter Production
- Market Settlement Timeline Transformation
- Energy Imbalance Market (EIM) Enhancements 2020
- Automated Dispatch System (ADS) User Interface (UI) Replacement
- FERC Order 841 – Requested Adjustments
- FRP Improvements - Buffer and Min
- Aliso Canyon Phase 5 – Dynamic Competitive Path Assessment
- Hybrid Resources - Phase 1

Release Plan Summary: 2021 - 2022

Independent 2021

- System Market Power Mitigation (BOG Q3,2020 and implementation prior to Q3, 2021)

Spring 2021

- Energy Imbalance Market (EIM) 2021 - Public Service Company of New Mexico
- Energy Imbalance Market (EIM) 2021 - North-Western Energy
- Energy Imbalance Market (EIM) 2021 - Los Angeles Dept. of Water and Power
- Energy Imbalance Market (EIM) 2021 - Turlock Irrigation District
- Energy Imbalance Market (EIM) 2021 - BANC Ph 2/WAPA

Fall 2021 – tentative, subject to impact assessment

- Day Ahead Market Enhancements (BOG 2021)
- Resource Adequacy (RA) Enhancements (BOG Q3/Q4 2020)
- Energy Storage and Distributed Energy Resources Phase 4 (BOG Sept 2020)
- Import Bidding and Market Parameters, (A.K.A. Import Bid Cost Verification and FERC Order 831) – July 2020 BOG
- Contingency Modeling Enhancements – Transmission
- Flexible Ramping Product Enhancements - Deliverability

Spring 2022

- Energy Imbalance Market (EIM) 2022 - Avista
- Energy Imbalance Market (EIM) 2022 - Tucson Electric Power
- Energy Imbalance Market (EIM) 2022 – Tacoma Power
- Energy Imbalance Market (EIM) 2022 – Bonneville Power Administration

Fall 2022 – tentative, subject to impact assessment

- Commitment Costs and Default Energy Bid Enhancements Phase 2
- Storage as a Transmission Facility

Release Schedule 2020

Date of Data Refresh: 4/17/2020

California ISO

Legend
- Market Simulation
- CA ISO Holiday
- External Testing
- Deployment Week

MAP Stage Environment Window

Item	Schedule
CCDEBE Phase 1 - Market Sim	CCDEBE Phase 1 - Market Sim (07/27-09/04)
ESDER Phase 3b - Load Shift Product - Market Sim	ESDER Phase 3b - Load Shift Product - Market Sim (07/27-09/04)
Dispatch Operating Target Tariff Clarification - Market Sim	Dispatch Operating Target Tariff Clarification - Market Sim (07/27-09/04)
Intertie Deviation Settlement - Market Sim	Intertie Deviation Settlement - Market Sim (07/27-09/04)
Excess Behind the Meter Production - Market Sim	Excess Behind the Meter Production - Market Sim (07/27-09/04)
Market Settlement Timeline Transformation - Market Sim	Market Settlement Timeline Transformation - Market Sim (07/27-09/04)
EIM Enhancements 2020 - Market Sim	EIM Enhancements 2020 - Market Sim (07/27-09/04)
ADS UI Replacement - Market Sim	ADS UI Replacement - Market Sim (07/27-09/04)
FERC841 Requested Adjustments - Market Sim	FERC841 Adjustments - Market Sim (07/27-09/04)
FRP Improvements - Buffer and Min - Market Sim	FRP Improvements - Buffer and Min - Market Sim (07/27-09/04)
Aliso Canyon 5 - DCPA - Market Sim	Aliso Canyon 5 - DCPA - Market Sim (07/27-09/04)
Hybrid Resources Phase 1 - Market Sim	Hybrid Resources Phase 1 - Market Sim (07/27-09/04)
Nodal Pricing Model - Market Sim	Nodal Pricing Model - Market Sim (10/05-11/15)
EIM - Public Service Company of New Mexico - Market Sim	EIM - Public Service Company of New Mexico - Market Sim (12/01-01/31)
EIM - North-Western Energy - Market Sim	EIM - North-Western Energy - Market Sim (12/01-01/31)
EIM - Los Angeles Dept. of Water & Power - Market Sim	EIM - Los Angeles Dept. of Water & Power - Market Sim (12/01-01/31)
EIM - Turlock Irrigation District - Market Sim	EIM - Turlock Irrigation District - Market Sim (12/01-01/31)
EIM - BANC Phase 2 / WAPA - Market Sim	EIM - BANC Phase 2 / WAPA - Market Sim (12/01-01/31)

Production Environment Window

Item	Schedule
OMS Deprecation of v1 Services	OMS Deprecation of v1 Services (05/01)
Settlements - Spring 2020 Release	Settlements - Spring 2020 Release (05/01)
Black Start & System Restoration Phase 2	Black Start & System Restoration Phase 2 (05/01)
Capacity Procurement Mechanism Soft Offer Cap Effective Trade Date	Capacity Procurement Mechanism Soft Offer Cap Effective Trade Date (06/01)
CCDEBE Phase 1 Activation	CCDEBE Phase 1 (07/01)
ESDER Phase 3 - DRRS	ESDER Phase 3 - DRRS (09/14)
ESDER Phase 3b - Load Shift Product	ESDER Phase 3b - Load Shift Product (10/01)
Dispatch Operating Target Tariff Clarification	Dispatch Operating Target Tariff Clarification (10/01)
Intertie Deviation Settlement	Intertie Deviation Settlement (10/01)
Excess Behind the Meter Production Deployment	Excess Behind the Meter Production Deployment (10/01)
Market Settlement Timeline Transformation Deployment	Market Settlement Timeline Transformation Deployment (10/01)
EIM Enhancements 2020	EIM Enhancements 2020 (10/01)
ADS UI Replacement	ADS UI Replacement (10/01)
FERC841 Requested Adjustments	FERC841 Adjustments (10/01)
FRP Improvements - Buffer and Min	FRP Improvements - Buffer and Min (10/01)
Aliso Canyon 5 - DCPA	Aliso Canyon 5 - DCPA (10/01)
Hybrid Resources Phase 1	Hybrid Resources Phase 1 (10/01)
Excess Behind the Meter Production Activation Effective Trade Date	Excess Behind the Meter Production Activation Effective Trade Date (01/01)
Market Settlement Timeline Transformation Activation Effective Trade Date	Market Settlement Timeline Transformation Activation Effective Trade Date (01/01)

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

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System Interface Changes

OMS							
Project	**Change Type**	**UI**	**API Service Name & Major Version, Artifacts**		**MAP Stage**	**Production**	**Technical Specifications**
N/A: Retire v1 Services	Deprecation	N/A	RetrieveResourceOutage_OMSv1_AP RetrieveResourceOutage_OMSv1_DocAttach_AP RetrieveResourceOutageChangeRequest_OMSv1_AP RetrieveResourceOutageChangeRequest_OMSv1_DocAttach_AP RetrieveTransmissionOutage_OMSv1_AP RetrieveTransmissionOutage_OMSv1_DocAttach_AP RetrieveTransmissionOutageChangeRequest_OMSv1_AP RetrieveTransmissionOutageChangeRequest_OMSv1_DocAttach_AP SubmitResourceOutage_OMSv1_AP SubmitResourceOutage_OMSv1_DocAttach_AP SubmitResourceOutageChangeRequest_OMSv1_AP SubmitResourceOutageChangeRequest_OMSv1_DocAttach_AP SubmitTransmissionOutage_OMSv1_AP SubmitTransmissionOutage_OMSv1_DocAttach_AP SubmitTransmissionOutageChangeRequest_OMSv1_AP SubmitTransmissionOutageChangeRequest_OMSv1_DocAttach_AP		✓ 4/13/20	4/27/20	N/A

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System Interface Changes

SIBR

Project	Change Type	API Service Name & Major Version, Artifacts	MAP Stage	Production	Technical Specifications
CCDEBE1	Modify	RetrieveCleanBidSet_SIBRv5_AP RetrieveCleanBidSet_SIBRv5_DocAttach_AP	✓ 10/16/19	✓ Deploy 3/26/20 Activation 10/1/20	13.2
CCDEBE1	Modify	RetrieveCurrentBidResults_SIBRv5_AP RetrieveCurrentBidResults_SIBRv5_DocAttach_AP	✓ 10/16/19	✓ Deploy 3/26/20 Activation 10/1/20	13.2
CCDEBE1	Modify	SubmitRawBidSet_SIBRv5_AP SubmitRawBidSet_SIBRv5_DocAttach_AP	✓ 10/16/19	✓ Deploy 3/26/20 Activation 10/1/20	13.2

BSAP

Project	Change Type	API Service Name & Major Version, Artifacts	MAP Stage	Production	Technical Specifications
EIM2019	Modify	RetrieveBalancingTestResults_BSAPv2_AP RetrieveBalancingTestResults_BSAPv2_DocAttach_AP	✓ 10/16/19	✓ Deploy 3/26/20 Activation Apr 2020	1.7.3

CMRI

Project	Change Type	UI	API Service Name & Major Version, Artifacts	MAP Stage	Production	Technical Specifications
LMPME CCDEBE1	Modify	Tab: Default Bids Existing Report: Default Energy Bid Curves	RetrieveDefaultBidCurves_CMRIv2_AP RetrieveDefaultBidCurves_CMRIv2_DocAttach_AP	LMPME ✓ 9/12/19 CCDEBE1 ✓ 11/6/19	LMPME ✓ 11/13/19 CCDEBE1 ✓ Deploy 3/26/20 Activation 10/1/20	3.9.4 Release Notes 1.2
CCDEBE1	Modify	Tab: Default Bids Existing Report: Default Commitment Costs	RetrieveExternalDefaultCommitmentCost_CMRIv1_AP RetrieveExternalDefaultCommitmentCost_CMRIv1_DocAttach_AP	✓ 11/11/19	✓ Deploy 3/26/20 Activation 10/1/20	3.9.4 Release Notes 1.2

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2020 Independent

2020 – Capacity Procurement Mechanism Soft Offer Cap

Project Info	Details/Date
Application Software Changes	**Scope:** • The scope of this initiative includes updating the Capacity Procurement Mechanism (CPM) soft offer cap and the consideration of payments for 12-month CPM designations. **Impacted Systems:** • No system/application impacts
BPM Changes	• Reliability Requirements
Tariff Changes	• 43A.4.1.1.1 • 43A.5.4 • 43A.6.2

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	N/A	
External BRS	Milestone: Post External BRS	N/A	
Config Guides	Config Guides	N/A	
Tech Spec	Create ISO Interface Spec (Tech spec)	N/A	
Tariff	File Tariff	Feb 25 , 2020	✓
	FERC decision requested by	May 28, 2020	
BPMs	Reliability Requirements - Tariff change 43A.6.2 needs to be added to section12.3.6	PRR process will start after FERC decision	
Market Sim	Market Sim Window	N/A	
Production Activation	CPM Soft Offer Cap	Jun 01, 2020	

California ISO

2020 – Nodal Pricing Model – Advisory Service for PacifiCorp

Reference – ISO market notice from Dec 18, 2019 – see: Stay Informed\Meetings and Events\Miscellaneous stakeholder meetings\Previous Meetings\2019 meetings\PacifiCorp nodal pricing model service informational call - Dec 18,2019 or http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=E8304346-54B9-4473-9E45-9C282AAD1340

Excerpt from the market notice:

"*The California ISO is hosting an informational stakeholder call on Dec. 18, 2019, to discuss an agreement that it intends to file with Federal Energy Regulatory Commission (FERC) that will provide PacifiCorp with an advisory nodal pricing model (NPM) service. Information related to this effort available on the ISO website at http://www.caiso.com/informed/Pages/MeetingsEvents/MiscellaneousStakeholderMeetings/Default.aspx.*

This service will produce separate advisory day-ahead nodal pricing results for locations within PacifiCorp's balancing authority areas, without a financial settlement or impact to the ISO's day-ahead market. PacifiCorp will pay the ISO's estimated cost to provide the service. PacifiCorp plans to use the NPM solution results as the basis for its power cost allocation among the states within which it provides retail electric service, consistent with the recently filed inter-jurisdictional cost allocation agreement."

As a result of this project, some charge codes will change. ISO will provide specific information for Configuration Guides changes that may impact all market participants. Availability of the impacted Configuration Guides is TBD.

FERC approved it on Feb 28, 2020
Target timeline for market simulation Oct 5, 2020 through Nov 15, 2020, with a go-live target of Jan 15.

2020 Fall Release

Fall 2020 Release – Overview

	BOG	BRS	Config Guide	Tech Spec	Mkt Sim Scenarios	Draft Tariff**	Draft BPMs	Training	Market Sim	Production Activation
Fall 2020 Release		**04/01/20**	**05/29/20**	**05/29/20**	**05/29/20**	**06/26/20**	**07/20/20**	**07/20/20**	**Jul 27, 2020 - Sep 4, 2020**	**10/01/20**
CCDEBE1	03/22/18	09/04/19	N/A	05/17/19		04/30/20	10/04/19	10/08/19	Jul 27, 2020 - Sep 04, 2020	10/01/20
ESDER Phase 3b - Load Shift Product	09/05/18	07/18/19 02/14/20 03/12/20 04/14/20	05/29/20	05/06/20 - DRRS 05/29/20 - MF	05/29/20	04/30/20	06/26/20	06/22/20	Jul 27, 2020 - Sep 04, 2020	09/14/20 - DRRS 10/01/20
Dispatch Operating Target Tariff Clarification	07/26/18	12/26/18	N/A	05/29/20	05/29/20	09/04/18	07/20/20	07/16/20	Jul 27, 2020 - Sep 04, 2020	10/01/20
Intertie Deviation Settlement	02/07/19	03/02/20	05/29/20	N/A	05/29/20	N/A	TBD	7/20/20	Jul 27, 2020 - Sep 04, 2020	10/01/20
Excess Behind the Meter Production	11/17/18	02/27/20	05/29/20	05/29/20	05/29/20	11/04/19	07/15/20	07/21/20	Jul 27, 2020 - Sep 04, 2020	01/01/21 (TD)
Market Settlement Timeline Transformation	11/14/19	02/06/20	05/29/20	05/29/20	05/29/20	06/26/20	07/20/20	07/20/20	Jul 27, 2020 - Sep 04, 2020	01/01/21 (TD)
EIM Enhancements 2020	N/A	03/24/20	05/29/20	05/29/20	05/29/20	N/A	TBD	07/23/20 09/21/20	Jul 27, 2020 - Sep 04, 2020	10/01/20
ADS UI Replacement	N/A	08/06/18	N/A	05/29/20	05/29/20	N/A	07/20/20	06/01/20 06/11/20 07/16/20	Jul 27, 2020 - Sep 04, 2020	10/01/20
FERC 841 – Requested Adjustments	N/A	04/01/20	5/29/20	05/29/20	05/29/20	1/21/20	TBD	TBD	Jul 27, 2020 - Sep 04, 2020	10/01/20
FRP Improvements - Buffer and Min	N/A	4/30/20	TBD	TBD	05/29/20	N/A	TBD	TBD	Jul 27, 2020 - Sep 04, 2020	10/01/20
Aliso Canyon 5 - DCPA	N/A	5/04/20	N/A	N/A	05/29/20	N/A	07/20/20	N/A	Jul 27, 2020 - Sep 04, 2020	10/01/20
Hybrid Resources Ph1	N/A	TBD	N/A	TBD	05/29/20	TBD	TBD	TBD	Jul 27, 2020 - Sep 04, 2020	10/01/20

Fall 2020 Release – System Impacts

Fall 2020 Release	ADS	CMRI	IFM / RTM	OASIS	Settlements	MF	DRRS	CIRA	MRI-S Metering	MRI-S Settlements	CIDI	BAAOP	BSAP
ESDER3B					Y	Tech Spec	Tech Spec	Y					
DOTTC	Tech Spec		RTM										
IDS	Y				Y								
EBtMP				Tech Spec	Y				Tech Spec				
Market Settlement Timeline Transf.		Tech Spec		Tech Spec	Y				Y	Y	Y		
EIM2020		Tech Spec	RTM	Y	Y	Tech Spec						Y	Y
ADS UI Replacement	Tech Spec												
FERC Order 841 – Requested Adjustment					Y	Tech Spec							
FRP Improvements - Buffer and Min			RTM	Tech Spec		Y							
Aliso Canyon 5 - DCPA			Y										
Hybrid Resources Ph 1			Y			Y							

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Fall 2020 Release – BPM Impacts

Fall 2020 Release	Mkt Instr	Mkt Ops	Stlmts & Billing	Definition& Acronyms	Outage Mgmt	Reliability Rqmts	Metering	Credit Mgmt & Market Clearing	EIM	Rules of Conduct Admin	Demand Response	Full Network Model	Generator	Gen Interconnection Protocol
ESDER3B	Y	Y			Y	Y	Y				Y			
Dispatch Op Target Tariff Clarification	Y	Y												
Intertie Deviation Stlmt			Y											
Excess Behind Meter Prod			Y	Y			Y							
Mkt Stlmt Timeline Trans	Y		Y	Y		Y	Y	Y	Y	Y				
EIM Enh 2020	Y													
ADS UI Repl	Y	Y												
FERC 841	Y		Y				Y							
FRP Buffer & Min	Y	Y												
Aliso Canyon 5 - DCPA		Y										Y		
Hybrid Resources Ph 1	Y	Y							Y				Y	Y

Fall 2020 Release - System Interface Changes

ADS					
Project	**Change Type**	**Summary**	**Technical Specifications**	**MAP Stage**	**Production**
ADS Replacement DOTTC	Modify	v7: Instructions to include Unannounced AS Test information	5/29/20	7/27/20	10/1/20

DRRS					
Project	**Change Type**	**Summary**	**Technical Specifications**	**MAP Stage**	**Production**
ESDER3B	Modify	RequestDRRegistrationData.xsd DRRegistrationData.xsd	5/6/20	7/27/20	Deploy 9/14/20
ESDER3B	New	Alternate API to only retrieve incremental data changes (Locations, Registrations)	5/6/20	7/27/20	Deploy 9/14/20
ESDER3B		Retrieval of the complete location approval process workflow details (LSE & UDC)	5/6/20	7/27/20	Deploy 9/14/20
ESDER3B		Retrieval of location records that are under the defense process	5/6/20	7/27/20	Deploy 9/14/20
ESDER3B		Retrieval of the location defense process workflow details (Incumbent & Prospective DRPs)	5/6/20	7/27/20	Deploy 9/14/20

MRI-S					
Project	**Change Type**	**Summary**	**Technical Specifications**	**MAP Stage**	**Production**
EBTMP	Modify	For: - MRIS Meter: Submit Meter & - MRIS Meter: Retrieve Meter additionally include EBtMP measurement type values (as negative load) both Gross Load and EBtMP meter data would associate with same Load Resource ID	5/29/20	7/27/20	Activation 1/1/21

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Fall 2020 Release - System Interface Changes

Master File					
Project	**Change Type**	**Summary**	**Technical Specifications**	**MAP Stage**	**Production**
ESDER3B		Add enumeration to GRDT web service	5/29/20	7/27/20	10/1/20
FERC841 RA		New GRDT attribute	5/29/20	7/27/20	10/1/20
EIM2020		New GRDT attribute	5/29/20	7/27/20	10/1/20
Other		Remove MIN_LOAD from GRDT	5/29/20	7/27/20	10/1/20

CMRI					
Project	**Change Type**	**Summary**	**Technical Specifications**	**MAP Stage**	**Production**
EIM2020	New	BAInfeasiblity_v1 BALoadConformingData	5/29/20	7/27/20	10/1/20

OASIS					
Project	**Change Type**	**Summary**	**Technical Specifications**	**MAP Stage**	**Production**
FRP Improvements Buffer & Min		TBD	5/29/20	7/27/20	10/1/20
EBTMP		TBD	5/29/20	7/27/20	Activation 1/1/21

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2020 – Commitment Cost and Default Energy Bid Enhancements Ph1

Project Info	Details/Date
Application Software Changes	**Scope:** Enhances the ability to submit market-based commitment cost bids in order to reflect unique costs and volatility: • Ex-ante cost adjustment requests • Reference Level Adjustments to default commitment cost bids (start-up and minimum load costs) and default energy bids • Make Day Ahead Market process permanent • Make D+2 Process permanent • Use of indices clarification, and Monday Only in DAM and RTM, per LMPME • Conditionally Available Resources (CAR) **Impacted Systems:** • SIBR: Allow the submittal of Ex Ante cost adjustments. • CMRI: Provide additional source information for default bids. Submit requests through CIDI for manual consultation and ex-post default bid adjustments.
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)

Fall 2020 – Commitment Cost and Default Energy Bid Enhancements Ph1

Milestone Type	Milestone Name	Dates	Status
Draft Policy	Publish Draft Business Rules externally	Jan 31, 2018	✔
Board Approval	Obtain Board of Governors Approval	Mar 22, 2018	✔
External BRS	Publish revised external BRS v1.1	Jan 22, 2019	✔
	Publish External BRS v1.2: Phase 1/Phase 2, clarifications	Mar 29, 2019	✔
	Publish External BRS v1.3: Reference Level Adjustments	Apr 05, 2019	✔
	Publish External BRS v1.4 for CCDEBE tariff traceability	Jul 19, 2019	✔
	Publish External BRS v1.5: implementation notes & clarifications	Sep 04, 2019	✔
Config Guides	Config Guide	N/A	
Tech Spec	Publish Technical Specifications	May 17, 2019	✔
	Publish Technical Spec. updates for CARs and Electric Pricing Hub weighting	Jun 28, 2019	✔
Tariff	File Tariff - CCDEBE Phase 1	Oct 11, 2019	✔
	FERC rejection with further guidance	Jan 21, 2020	✔
	Re-file Tariff	April 30, 2020	
BPMs	Publish draft Market Instruments: Attachment O on CCDEBE Stakeholder Processes page	Oct 04, 2019	✔
	PRR 1203 published: CCDEBE updates to Market Instruments BPM, incl. Attachment O	Oct 18, 2019	✔
External Training	Deliver External Training	Oct 08, 2019	✔
	Finalize external training material	Oct 04, 2019	✔
Market Sim	Market Sim Window – Fall 2019	Oct 14, 2019 - Dec 03, 2019	✔
	Market Sim Window – Fall 2020	Jul 27, 2020 - Sep 04, 2020	
Production Activation	CCDEBE Phase 1	October 1, 2020	

Fall 2020 – ESDER Phase 3b – Load Shift Product

Project Info	Details/Date
Application Software Changes	**Scope:** The ESDER 3b initiative will include two (2) demand response enhancements: • Addition of a Load Shift Product wherein demand response resources with behind the meter (BTM) storage devices can participate in both load consumption and load curtailment. • Enable sub-metered electric vehicles supply equipment (EVSE) to participate in load curtailment. **Impacted Systems (Overview):** **Master File:** • Registration of new PDR Resource Types and business rules for PDRs with BTM storage devices and wanting to participate in both Load Curtailment and Consumption. • Two (2) Resource IDs will be assigned to the same Resource to allow Consumption versus Curtailment participation (PDR-LSR). **DRRS:** • New baseline methods for PDR-LSRs and EVSEs. • New attribute for locations to indicate an energy storage (ES) device or Electric Vehicle Supply Equipment (EVSE). **CIRA:** • Will prevent the request of NQC for PDR-LSR Consumption resources **Settlements**

# Fall 2020 – ESDER Phase 3b – Load Shift Product (cont.)

Project Info	Details/Date
BPM Changes	• Market Instruments, Market Operations, Outage Management, Reliability Requirement, Metering and Demand Response
Tariff Change	Sections 4.13, 6.4, 6.5, 11.6, 11.8, 31.3, 34.1,34.4, 34.5, 30.7 and 34.8

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Sep 05, 2018	✔
External BRS	Post External BRS v1.4	Jul 18, 2019	✔
	Post External BRS v1.5	Feb 14, 2020	✔
	Post External BRS v1.6	Mar 12, 2020	✔
	Post External BRS v1.6	Apr 14, 2020	✔
Config Guides	Post Draft Config Guides	May 29, 2020	
Tech Spec	Publish Technical Specifications - DRRS	May 06, 2020	
	Publish Technical Specifications - MF	May 29, 2020	
Tariff	Post Draft Tariff	Apr 30, 2020	
	File Tariff	Jul 14, 2020	
BPMs	Post Draft BPM changes	Jun 26, 2020	
External Training	External Training	Jun 22, 2020	
Market Sim	MARKET SIMULATION	Jul 27, 2020 - Sep 04, 2020	
Production Activation	ESDER Phase 3 - DRRS	Sep 14, 2020	
	ESDER Phase 3b - Load Shift Product	Oct 01, 2020	

Fall 2020 – ESDER Phase 3b – Load Shift Product (cont.)

Energy Storage and Distributed Energy Resources Phase 3B – Transition Timeline
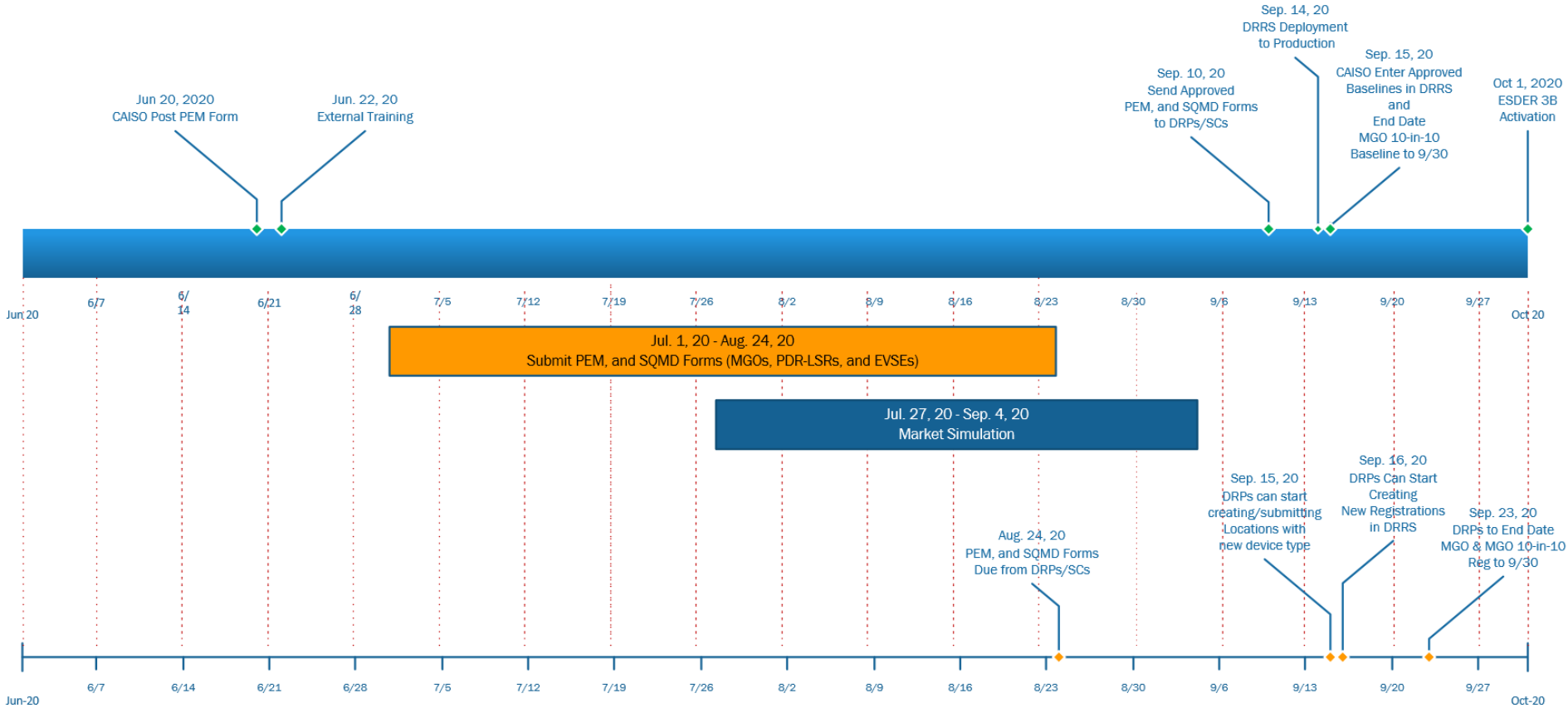
Note: SC shall follow the normal Master File process. Master File may take up to 10 business days for processing.

Fall 2020 – Dispatch Operating Target Tariff Clarification

Project Info	Details/Date
Application Software Changes	**Scope:** Allow Energy Intermittent Resources (EIRs) to automate their response to operational instructions that require the resource not to exceed their Dispatch Operating Target. **Impacted Systems:** **RTM:** Operator can select EIR resources, system to send Operating instruction Flag to ADS **ADS:** Receive Operating instruction flag for EIRs. Broadcast message to EIRs operator.
BPM Changes	Market Instruments Market Operations
Tariff Change	Changes tariff language from "Operating Order" to "Operating Instruction" in multiple sections.

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Jul 26, 2018	✓
External BRS	Milestone: Post External BRS	Dec 26, 2018	✓
Config Guides	Design review - BPM and Tariff SMEs	N/A	
Tech Spec	Publish Technical Specifications	May 29, 2020	
Tariff	Draft Tariff	Sep 04, 2018	✓
	File Tariff	Oct 29, 2018	✓
BPMs	Post Draft BPM changes	Jul 20, 2020	
External Training	Deliver External Training	Jul 16, 2020	
Market Sim	Market Sim Window	Jul 27, 2020 - Sep 04, 2020	
Production Activation	Dispatch Operating Target Tariff Clarification	Oct 01, 2020	

Fall 2020 – Intertie Deviation Settlement

Project Info	Details/Date

Application Software Changes	**Scope:**
	  Implement a new Under/Over Delivery Charge for intertie deviations from Market Schedule and After-The-Fact (ATF) E-Tag, to replace Decline charge
	
	Impacted Systems:
	Settlements
	  • Calculate FMM binding intertie award, exclude Curtailment, calculate under/over delivery quantity as deviation of schedule and ATF E-Tag, Charge under/over delivery Charge at 50% of RTD LMP.
	  • Remove the decline charge calculation and Decline Threshold
	  • Allocate Over/Under delivery charge to measured demand
	ADS - display the HASP schedule, the scheduling coordinator accepted value, and the difference between the two
	
	RTM - determine the 15-minute binding award for hourly intertie resources based on the E-Tag at T-40.

BPM Changes	Settlements and Billing
Tariff Change	Section 11.32

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Feb 07, 2019	✓
External BRS	Post External BRS	Mar 02, 2020	✓
Config Guides	Post Draft Config Guides	May 29, 2020	
Tech Spec	Publish Technical Specifications	N/A	
Tariff	Tariff Activities	N/A	
BPMs	Post BPM Changes	TBD	
External Training	Deliver External Training	Jul 20, 2020	
Market Sim	Market Sim Window	Jul 27, 2020 - Sep 04, 2020	
Production Activation	Intertie Deviation Settlement	Oct 01, 2020	

Fall 2020 – Excess Behind the Meter Production

Project Info	Details/Date

Application Software Changes	**Scope:**
	• Clarify the Tariff definition of Gross Load per amended tariff definition
	• Establish how EBtMP will be submitted, reported, and settled
	• Provide option for entities with meter agreements existing prior to ISO to submit EBtMP interval meter data
	• Update definitions for Net Load and Unaccounted For Energy settlement calculations
	• Publish EBtMP performance to market participants
	
	Impacted Systems:
	MRI-S - Meter submission
	• Allow SC to submit Gross Load and EBtMP under the single Resource ID
	   • New EBtMP measurement type for interval meter data submission; existing Load measurement type interval meter data submission with represent new Gross Load tariff definition
	      • Meter submission UI and API will accept the new EBtMP measurement type
	
	OASIS
	• Publish hourly aggregated EBtMP by TAC area once meter data submission deadline passes for settlement date
	
	Settlements
	• Modify Net Load and UFE calculations to align with tariff amendments:
	   • NET LOAD = GROSS LOAD METER – EXCESS BTMPRODUCTION METER
	   • UFE QUANTITY = GENERATION METER + INTERTIE IMPORT METER – (NET LOAD METER + EXPORT INTERTIE METER + RTD LOSS MW)
	• New Excess Behind the Meter Production (EBtMP) metered value bill determinant will be provided (similar to metered Load today)
	• Modify follow charge codes to settle based on Gross Load (Reliability based charge codes, list may not be comprehensive – See updated Settlements Configuration Guides)
	   • 372 High Voltage Access Charge Allocation (UDC gross load)
	   • 382 High Voltage Wheeling Allocation (Non PTO load)
	   • 383 Low Voltage Wheeling Allocation (Non PTO load)
	   • 591 Emissions Cost Recovery (Measured Demand)
	   • 1101 Black Start Capability Allocation
	   …

Project Info	Details/Date

Application Software Changes (cont.)	**Impacted Systems:**
	Settlements (continued);
	• Modify follow charge codes to settle based on Gross Load (Reliability based charge codes, list may not be comprehensive – See updated Settlements Configuration Guides)
	   • 1302 Long Term Voltage Support Allocation
	   • 1303 Supplemental Reactive Energy Allocation
	   • 6090 Ancillary Service Upward Neutrality Allocation
	   • 6194 Spinning Reserve Obligation Settlement
	   • 6196 Spinning Reserve Neutrality Allocation
	   • 6294 Non-Spinning Reserve Obligation Settlement
	   • 6296 Non-Spinning Reserve Neutrality Allocation
	   • 6594 Regulation Up Obligation Settlement
	   • 6596 Regulation Up Neutrality Allocation
	   • 6694 Regulation Down Obligation Settlement
	   • 6696 Regulation Down Neutrality Allocation
	   • 7256 Regulation Up Mileage Allocation
	   • 7266 Regulation Down Mileage Allocation
	   • 7896 Monthly CPM Allocation

BPM Changes	• **Definitions & Acronyms:**
	   • Update definition of Gross Load
	   • Add Excess Behind the Meter Production
	• **Metering**
	   • Submission, retrieval of new measurement type (EBtMP)
	• **Settlements & Billing**
	   • See Settlements Configuration Guide for changes

Tariff Change	• **Appendix A:**
	   • Clarify Gross Load definition, Update Demand definitions,
	   • Add new term Excess Behind the Meter production
	• **Section 11:**
	   • Update reliability based tariff reference sections to be based upon gross load

EBTMP Frequently Asked Questions (FAQ) guide available via the [Release Planning](#) page of www.caiso.com.

Fall 2020
- ⊕ Automated Dispatch System (ADS) replacement
- ⊕ Dispatch operating target tariff clarification - implementation
- ⊕ Energy imbalance market enhancements 2020
- ⊕ Energy storage and distributed energy resources phase 3 - implementation
- ⊖ Excess behind the meter production - implementation
  - 📄 Business Requirements Specification v1.1 - Excess Behind the Meter Production   4/16/2020 15:55
  - 📄 Business Requirements Specification v1.1 - Excess Behind the Meter Production - Redline   4/16/2020 15:55
  - 📄 Frequently Asked Questions v1.1 - Excess Behind the Meter Production   4/16/2020 15:55
  - 📄 Frequently Asked Questions v1.1 - Excess Behind the Meter Production - Redline   4/16/2020 15:55
  - 📄 Frequently Asked Questions - Scheduling Coordinator Meter Entity Gross Load Calculation Example   4/16/2020 15:55
- ⊕ FERC Order No. 841 requested adjustments
- ⊕ Intertie deviation settlment - implementation
- ⊕ Market settlement timeline transformation

Clarification provided for:

– Final submission timeline (T+52B) per Settlement Timeline Transformation

– DLAP, net, and gross load data submission

Fall 2020 – Excess Behind the Meter Production (cont.)

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Nov 17, 2018	✓
External BRS	Publish Market Notice, External BRS to Release Planning	Feb 27, 2020	✓
	Publish External BRS update (v1.1), FAQ update	Apr 16, 2020	✓
Config Guides	Post Draft Config Guides	May 29, 2020	
Tech Spec	Publish Technical Specifications	May 29, 2020	
Tariff	File Tariff	Oct 01, 2020	
	Tariff Stakeholder Walkthrough	Dec 04, 2019	✓
	Draft Tariff published	Nov 04, 2019	✓
BPMs	Post Draft BPM changes	Jul 15, 2020	
	Publish Final Business Practice Manuals	Aug 10, 2020	
External Training	Deliver external training webinar	Jul 21, 2020	
Market Sim	Market Sim Window	Jul 27, 2020 - Sep 04, 2020	
Production Activation	Excess Behind the Meter Production Deployment	Oct 01, 2020	
	Excess Behind the Meter Production Effective Trade Date	Jan 01, 2021	

Fall 2020 – Market Settlement Timeline Transformation

Project Info	Details/Date
Application Software Changes	**Scope:** • The California ISO is proposing changes to its market settlement timeline to reduce market participant financial exposure by producing initial settlement statements that will more closely approximate the final settlement, and allow sufficient time for CAISO and market participants to resolve disputes. • The California ISO's current settlement timeline is compressed, which places potentially avoidable burdens on CAISO and market participants. The compressed timeline causes CAISO to publish initial statements of lower financial quality and to sometimes delay the publication of its settlement statements. These inefficiencies impact market participants as they must bear a financial burden of varying magnitude for many business days. • The California ISO and market participants also devote a large level of effort to correct data, re-calculate, process, and validate relatively small financial adjustments associated with optional re-calculations long after the settlement trade date has passed. • To resolve inefficiencies and issues, CAISO proposes to calculate and publish two settlement statements within seventy (70) business days after a trade date and re-align the due dates for settlement quality meter data. • Additionally, and under certain defined circumstances, CAISO proposes to re-calculate and publish three settlement statements between seventy (70) business days after a trade date and twenty-four (24) months after a trade date thus reducing the normal settlement life cycle from thirty-six to twenty-four months.

Application Software Changes (cont.)	**Impacted Systems:**
	CIDI:
	    The disputable statements in the Statement Disputed drop-down list will be updated to include the new statements per the MSTT. CAISO will continue to accept disputes from the date of statement publication through the dispute deadline, as prescribed by the tariff, and continue to calculate the Adjustment Publication Date based on the Correction Statement, as selected by the dispute analyst, and the Trade Date disputed.
	CMRI: Data retention impact due to reducing from 36 months to 24 months.
	MRI-S Metering:
	    • Impacts to the external data submission windows that currently exist, as well as the data transfers from MV-90 to MRI-S Metering and MRI-S Metering to Settlements.
	    • Data submission/freeze timeline.
	MRI-S Settlements:
	    • Update the Post Date calculation, as the payment calendar will change.
	    • Auto scheduling for statement generation.
	    • Statement posting.

Project Info	Details/Date	
Application Software Changes (cont.)	**Market Clearing:** Updates needed to the deviation Interest calculations and credit calculation functions. Updates needed for invoice clearing and interest calculations. Check PTB publication timeline for any updates. Will impact the Extrapolation Component (one of 16 EAL Components) for Daily & Monthly Extrapolation and credit calculation. **Recalculation Log:** Post update recalculation log. **Payment Calendar:** Post the payment calendar to reflect overlap between existing and new timeline. **OASIS:** • Data retention impact due to reducing from 36 months to 24 months. • FERC 841 related data availability needs to be vetted.	
BPM Changes	Credit Management and Market Clearing Definitions & Acronyms Energy Imbalance Market Market Instruments Metering Reliability Requirement	Rules of Conduct Administration Settlements and Billing • Section 2.3.2 – Schedule for Settlement Statement Publication • Section 2.3.5.1.1 – Dispute Timing • Section 2.3.6 – Billing & Payment • Section 2.4 – Payment Calendars
Tariff Change	Section 10: Metering Section 11: California ISO Settlements and Billing (Publication Contingency document) Section 12: Creditworthiness Section 13: Dispute Resolution	Section 26: Transmission Rates And Charges Section 27: California ISO Markets And Processes Section 29: Energy Imbalance Market Section 37: Rules Of Conduct

Fall 2020 – Market Settlement Timeline Transformation (cont.)

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	Nov 14, 2019	✓
External BRS	Post External BRS	Feb 06, 2020	✓
Config Guides	Post Draft Configuration Guides	May 29, 2020	
Tech Spec	Create ISO Interface Spec (Tech spec)	May 29, 2020	
Tariff	Draft Tariff	Jun 26, 2020	
BPMs	Post Draft BPM changes	Jul 20, 2020	
External Training	Deliver External Training	Jul 20, 2020	
Market Simulation	Market simulation window	Jul 27, 2020 - Sep 04, 2020	
Production Activation	Market Settlement Timeline Deployment	Oct 01, 2020	
	Market Settlements Timeline Effective Trade Date	Jan 01, 2021	

California ISO

Fall 2020 – EIM Enhancements 2020

Project Info	Details/Date
Application Software Changes	**Scope:** Energy Imbalance Market Enhancements 2020, is to collectively address important issues identified by EIM market participants through Customer Inquiry, Dispute and Information system (CIDI) requests to improve the visibility, functions and features in Energy Imbalance Market (EIM) Technology team and customer services review the 66 EIM enhancement requests by EIM entities and 4 internal request by ISO market operator. Combine each EIM entities submitted the priority list of 10 enhancements, ISO determine to include total 15 requests in EIM enhancement 2020 project. **Impacted Systems:** **BAAOP** - Allow EIM entity override activation for the contingencies up to 15 in NA contingency list - Add visibility of other adjacent BAA's ETSR locks and reasons - Add Static ETSR transfer data to RTD Dispatch Control Display (ETSR tab). Add Static ETSR transfer data to BAAOP ETSR Detail Display (in RTD) - Fix/Improve SVG One Lines. Request to be able to view SE and telemetry values for all substation flows and elements. - In RTD/RTPD Dispatch Control display, in Dispatch Instruction Review table, add columns for UP and DN remaining ramp capacity (5/15 minute respectively). In addition, include the sum of these columns at bottom of table. Example Calculation: RTD UP Ramp = MIN(5MinRampRate, [UpperLim-CurrentDispatch]. - Add Supplemental DOT to VER resources to Dispatch Control displays; Detail: In BAAOP RTD/RTPD Dispatch Control, add SUPP DOT column - Fix the functionality for Manual Dispatches - users should be able to utilize MSG functions, such as designating a specific configuration, and users should be able to do commitment override - Utilize the "information" button in the market UI to connect to Knowledge Articles from CIDI for both ISO and EIM Operator - EIM Entities have a notification status of market inputs, showing if BAAOP received the latest payload of critical market inputs. Example Critical data submissions: (not all inclusive) - BAAOP Dynamic Limits - BAAOP RTIS - ALFS (load forecast and/or VER forecast) - ICCP link

California ISO

ISO PUBLIC

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Project Info	Details/Date
Application Software Changes (cont.)	**Impacted Systems:** **BSAP** • Add Manual Dispatch information to BSAP Resource Bal Viewer. Add any applicable deviations that used in the test to BSAP BAA Bal Viewer. • For the Bid Range Capacity Test Results report, Requirement Amount Column needs to publish the true requirement, not just the INCREMENTAL/DECREMENTAL requirement **RTM** • Publish the data of the MW infeasibility data and ABC Up and Down Dispatches of RTPD/RTD • Publish the effective load bias for the market run for RTPD and RTD • Publish the effective ETSR import and export limits for the market run for RTPD and RTD **CMRI** • Display and publish, download the data of the MW infeasibility data and ABC Up and Down Dispatches of RTPD/RTD • Display and publish, download the data of the effective load bias for the market run for RTPD and RTD • Display and publish, download the effective ETSR import and export limits for the market run for RTPD and RTD • For the Bid Range Capacity Test Results report, Requirement Amount Column needs to display and publish, download the true requirement, not just the INCREMENTAL/DECREMENTAL requirement **OASIS** • The Net EIM transfer limit report in OASIS shall be available for download via API. **Settlements**
BPM Changes	Market Instruments
Tariff Change	N/A

Fall 2020 – EIM Enhancements 2020 (cont.)

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	N/A	
External BRS	Milestone: Post External BRS	Mar 24, 2020	✓
Config Guides	Post Draft Config Guides	May 29, 2020	
Tech Spec	Create ISO Interface Spec (Tech spec)	May 29, 2020	
Tariff	File Tariff	N/A	
BPMs	Draft BPM changes	TBD	
External Training	Deliver External Training	Jul 23, 2020 Overview Training Sep 21, 2020	
Market Sim	Market Sim Window	Jul 27, 2020 - Sep 04, 2020	
Production Activation	EIM Enhancements 2020	Oct 01, 2020	

California ISO

Fall 2020 – ADS Replacement

Project Info	Details/Date
Application Software Changes	• Transition to web-based user interface to eliminate the need to install thick client • Transition ADS provisioning to the Access and Identity Management (AIM) application including Resource Level Access Controls (RACL) access • The query tool will provide 30 days of historical data • Various user interface enhancements adding content per Operation's request • ADS B2B services changes
BPM Changes	• Market Instruments • Market Operations
Tariff Changes	• N/A

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	N/A	
External BRS	Post External BRS	Aug 06, 2018	✔
ADS Update	ADS Update Meeting	Aug 15, 2018	✔
ADS Demonstration	ADS WebEx Demonstration	Apr 16, 2020	✔
Config Guides	Design review - BPM and Tariff SMEs	N/A	
Tech Spec	Publish Technical Specifications	May 29, 2020	
Preview	ADS Replacement Application Preview	Jun 22, 2020	
Tariff	Tariff Activities	N/A	
BPMs	Post Draft BPM changes	Jul 20, 2020	
External Training	Provisioning ADS ACL Training	Jun 01, 2020	
	External Training Part 1 (Application Preview preparation)	Jun 11, 2020	
	Deliver External Training Part 2	Jul 16, 2020	
Market Sim	Market Sim Window	Jul 27, 2020 - Sep 04, 2020	
Production Activation	ADS Replacement	Oct 01, 2020	
Production	ADS Parallel Operations	TBD	
Decommission	Old ADS Decommission	TBD	

Fall 2020 – FERC Order 841 – Requested Adjustments

Project Info

In November, 2019 FERC responded to ISO compliance filing for FERC Order No. 841. FERC generally accepted CAISO compliance filing, finding that the NGR model and pumped storage model account for the physical and operating characteristics of storage, and that the CAISO appropriately does not assess TAC to energy storage.

FERC took some exceptions with CAISO compliance filing, as follows:

- While accepting that the NGR and Pumped Storage model accommodate the physical and operating characteristics of storage, FERC directs the CAISO to capture the corresponding Master File parameters for storage that are currently in the BPM in the tariff

- FERC disagrees that ancillary service qualification requirements were outside the scope of the order, directing the CAISO to lower its minimum capacity requirements for ancillary services from 500 kW to 100 kW for storage resources

- Finding it unclear whether the CAISO's metering and accounting practices allow for simultaneous participation in both retail and wholesale markets, FERC directs the CAISO to clarify metering and accounting practices for storage in the tariff

- FERC disagrees that the demand response MGO methodology complies with its requirement to avoid duplicative billing where a UDC is unwilling or unable to exempt a storage resource from retail charges. FERC directs the CAISO to create or modify a participation model that will exempt a storage resource from wholesale charges where it already pays retail charges.

CAISO responded to FERC with a subsequent compliance filing Jan 21. We requested a target implementation of these adjustments by Oct 1, 2020 (Fall Release)

California ISO

Fall 2020 – FERC Order 841 – FERC requested adjustments

Project Info	Details/Date
Application Software Changes	• Master File • Settlements
BPM Changes	• Market Instruments • Metering • Settlements and Billing
Tariff Changes	• New Tariff Section 10.1.3.4 • Updates to 4.6.11, 27.9, Appendix K

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	N/A	
External BRS	Milestone: Post External BRS	Apr 01, 2020	✓
Config Guides	Post Draft Config Guides	May 29, 2020	
Tech Spec	Create ISO Interface Spec (Tech spec)	May 29, 2020	
Tariff	File Tariff	Jan 21, 2020	✓
BPMs	Post Draft BPM changes	TBD	
External Training	Deliver External Training	TBD	
Market Sim	Market Sim Window	Jul 27, 2020 - Sep 04, 2020	
Production Activation	FERC 841 - Requested Adjustments	Oct 01, 2020	

Fall 2020 – FRP Improvements – Buffer and Min

Project Info

Improvements are needed for addressing the flexible ramping product (FRP) issues identified in the CAISO Energy Markets Price Performance report. The flexible ramping product secures additional ramping capability that can be dispatched in subsequent market runs to cover a range in the forecasted net load.

The scope behind this policy and project include:

- To maintain up to 100% (configurable) of FRP awards in the buffer interval that were procured in the prior Fifteen Minute Market (FMM) to preserve ramping capability for the Real Time Dispatch (RTD).

- Changing Proxy Demand Response (PDR) dispatch capability default from five minute to hourly.

- To enforce a minimum FRP requirement in the Balancing Authority Area (BAA) that will ensure a minimum amount of FRP to be procured from resources within the BAA.

Project Info	Details/Date
Application Software Changes	• Master File • RTM (Real Time Market) • OASIS (Open Access Same time Information System)
BPM Changes	• Market Instruments • Market Operations
Tariff Changes	• N/A

Fall 2020 – FRP Improvements – Buffer and Min

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	N/A	
External BRS	Milestone: Post External BRS	4/30/2020	
Config Guides	Post Draft Config Guides	TBD	
Tech Spec	Create ISO Interface Spec (Tech spec)	TBD	
Tariff	File Tariff	N/A	
BPMs	Post Draft BPM changes	TBD	
External Training	Deliver External Training	TBD	
Market Sim	Market Sim Window	Jul 27, 2020 - Sep 04, 2020	
Production Activation	FRP Improvements - Buffer and Min	Oct 01, 2020	

Fall 2020 – Aliso Canyon Ph5 - Dynamic Competitive Path Assessment

Project Info	Details/Date
Application Software Changes	**Scope**: This project will consider enhancements to the existing Dynamic Competitive Path Assessment (DCPA) and Gas Nomogram capabilities currently in production. **IFM/RTN**: Formulate and solve the linear programming problem for maximizing the Residual Supplier Index (RSI) for each binding constraint that DCPA is applied. **SMDM:** Enhance the User Interface to include "All Markets" when the user is defining "Market" within the Curtailment to Process section. **SMDM:** Creation of error message if the RT curtail type "incremental" or "absolute" are used and total curtailment is left null.
BPM Changes	• Managing Full Network Model • Market Operations
Tariff Changes	• N/A

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval - NO BOG Needed	N/A	
External BRS	Milestone: Post External BRS	May 04, 2020	
Config Guides	Post Draft Config Guides	N/A	
Tech Spec	Publish Technical Specifications	N/A	
Tariff	File Tariff	N/A	
BPMs	Post Draft BPM changes	Jul 20, 2020	
External Training	Deliver External Training	N/A	
Market Sim	Market Sim Window	Jul 27, 2020 - Sep 04, 2020	
Production Activation	Aliso Canyon Phase 5 - Dynamic Competitive Path Assessment	Oct 01, 2020	

Fall 2020 – Hybrid Resources

Project Info	Details/Date
Application Software Changes	**Scope:** - Update NRI process (for ISO co-located resources) and EIM Entity SC Process (for EIM co-located resources) to account for association to interconnection constraint; determine constraint max and min limits - Model co-located resources with generation aggregate interconnection constraint - IFM and RTM market enhancements to model, enforce interconnection constraint for co-located resources **Impacted Systems:** - Master File enhancements to model interconnection constraint for associated co-located resources (ISO and EIM) - IFM/RTM markets will model the generation aggregate interconnection constraint (includes modeling constraint within EIM Resource Sufficiency Tests)
BPM Changes	• Energy Imbalance Market • Generator Management • Generator Interconnection Protocol • Market Operations • Market Instruments
Tariff Changes	• Tariff Sections TBD

Milestone Type	Milestone Name	Dates	Status
Board Approval	Obtain Board of Governors Approval	N/A	
External BRS	Milestone: Post External BRS	TBD	
Config Guides	Post Draft Config Guides	N/A	
Tech Spec	Create ISO Interface Spec (Tech spec)	TBD	
Tariff	Draft Tariff	TBD	
BPMs	Draft BPM changes	TBD	
External Training	Deliver External Training	TBD	
Market Sim	Market Sim Window	Jul 27, 2020 - Sep 04, 2020	
Production Activation	Hybrid Resources Phase 1	Oct 01, 2020	

2021 Spring Release

Spring 2021 – EIM integrations for PNM, LADWP, TID, NWE and BANC Phase 2

Project Info	Details/Date
Application Software Changes	Implementation of PNM, LADWP, TID, NWE and BANC Phase 2 as EIM Entities
BPM Changes	EIM BPM will be updated if needed to reflect new modeling scenarios identified during implementation and feedback from PNM, LADWP, TID, NWE and BANC Phase 2.
Market Simulation	December 2020 – January 2021
Parallel Operations	February 2021 – March 2021

Milestone Type	Milestone Name	Dates	Status
Market Sim	Market Sim Window	December 2020 – January 2021	
Parallel Operations	Parallel Operations	February 2021 – March 2021	
Tariff	File Readiness Certification	March 2021	
Production Activation	EIM – PNM, LADWP, TID, NWE and BANC Phase 2	April 2021	

Stay Informed

Ways to participate in releases

- Visit the Release Planning page
  - http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

- Attend meetings
  - Release Users Group (RUG) bi-weekly meetings
    - Initiative status updates
    - System change updates on independent releases
  - Market Simulation calls
    - Visit the ISO calendar at www.caiso.com for meeting dates and times and add events to your calendar
    - Typically held on Mondays and Thursdays
  - Market Performance and Planning Forum
    - Bi-monthly review of market performance issues
    - High level discussion of release planning, implementation and new market enhancements

What to look for on the calendar…