

Market Simulation Call - Fall 2020 Release

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Market Simulation Coordinator

August 13, 2020

Recordings

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Agenda

- MAP Stage Availability
- Fall 2020 Release Market Simulation Initiatives & Timelines
- Known Issues ADS
- Trouble-shooting tips to access ADS
- Known Issues DRRS, MF
- DRRS UI Upgrade features
- Initiatives
 - Automated Dispatch System (ADS) replacement
 - Dispatch operating target tariff clarification
 - Energy imbalance market enhancements 2020
 - Energy storage and distributed energy resources phase 3
 - FERC Order No. 841 requested adjustments
 - Commitment costs and default energy bid enhancements
 - Commitment cost enhancements tariff clarifications
 - Market settlement timeline transformation
 - Excess behind the meter production
- Next Steps



Fall 2020 Release MAP Stage Availability

- Refer to MAP Stage portal https://portalmap.caiso.com for system availability information
- Current MAP Stage Maintenance
 - None
- Upcoming MAP Stage Maintenance
 - 8/14: DRRS UI/API brief interruption
 - 8/14: CMRI UI for UI Upgrade brief interruption
 - 8/21: ADS UI brief interruption
 - 8/21: MF Database brief interruption
 - 8/28: CMRI UI/API for Fall 2020 Release deployment Closure, system will be unavailable
- MAP Stage Weekly Maintenance Window
 - Friday



Fall 2020 Release Market Simulation Initiatives & Timelines

Fall 2020 Release Initiatives	Start Date	Start Date (Trade Date)	End Date	Structured Simulation Start (Trade Date)
Fall 2020 Release Market Simulation Phase 1	07/27/20	07/28/20	09/04/20	08/11/20
Automated Dispatch System (ADS) replacement				08/11/20 (Completed)
Commitment costs and default energy bid enhancements				NA
Dispatch operating target tariff clarification				08/12/20 (Completed)
Energy imbalance market enhancements 2020				NA (08/31/20) Scenarios will be available to test as unstructured with a guide
Energy storage and distributed energy resources phase 3				08/19/20
FERC Order No. 841 requested adjustments				08/12/20 (Settlement processing in progress)
Commitment cost enhancements tariff clarifications				NA
Fall 2020 Release Market Simulation Phase 2	07/27/20	07/28/20	09/18/20	08/25/20
Market settlement timeline transformation				08/25/20
Excess behind the meter production				08/25/20

Market Simulation Plan:

http://www.caiso.com/Documents/MarketSimulationPlan-Fall2020Release.pdf



Known Issues - ADS

#	System	Summary	Status	Estimated Fix Date
1	ADS	User receives 'ERROR PROCESSING REQUEST' ✓ Quick fix: CAISO will clean session manually for the user ✓ CAISO is tracking this issue and is expected to be fixed before the start of Market Simulation	Fixed on 8/7	
2	ADS	Last Tab does not show table and is malformed	Fixed on 8/7	
3	ADS	Error "User does not have the necessary authorization for accessing the application"	Fixed on 8/7	
4	ADS	Continuous Alarm Change to repeat every x seconds (recommend 5 seconds)	Open	TBD
5	ADS		Fixed on 8/7. Working with reported user directly to validate.	
6	ADS	Participant reported the 'Page Unresponsive' issue	Fixed on 8/7	
7	ADS	Trajectory grid shrinks (Grid Auto resize does not work properly)	Open	8/21



Trouble-shooting tips to access ADS

- Check your firewall settings.
- Clear the browser cache & cookies.
- Pop-up blockers on your browser may lead to issues accessing CAISO ADS.
- If you use a pop-up blocker, you must whitelist the CAISO domain (caiso.com)



Known Issues - DRRS, MF

#	System	Summary	Status	Estimated Fix Date
8	DRRS	UI: Advanced filter input controls do not automatically close as the user is clicking from one control to another, causing the controls (date picker, text fields, dropdown lists, etc) to stack on top of each other. User must click on the control to make it disappear.	New	TBD
9	DRRS	 UI: The application disconnect/connect icon and its respective display text are not in-sync: When the application is disconnected caused by a timeout, the text displays as "Connected" where it should display as "Disconnected". When the application reconnects, the icon does not display as connected While there is an issue with the visual feedback, the application functionality is not impacted. 	New	TBD
10	MF	 GRDT v13 errors Please use Fall 2020 Release GRDT v14 	New	8/21



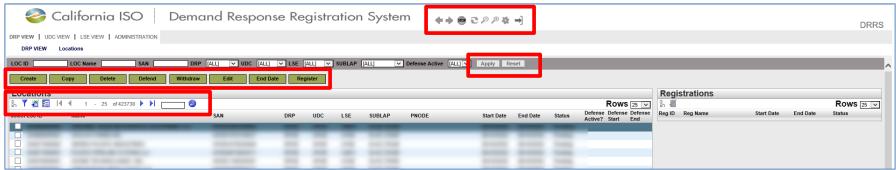
Reminder: DRRS UI Upgrade features

- Image icons, control buttons, label fonts have a new different color scheme
- The "Apply" and "Reset" buttons appear on the far right side of the screen, as opposed to appearing after the last display input filter
- The data grid output export filename no longer contain the user certificate name
- The application window is not maximized by default, when launching the application
- The data grid columns are no longer adjustable
- Technical User Group Presentation 6/23

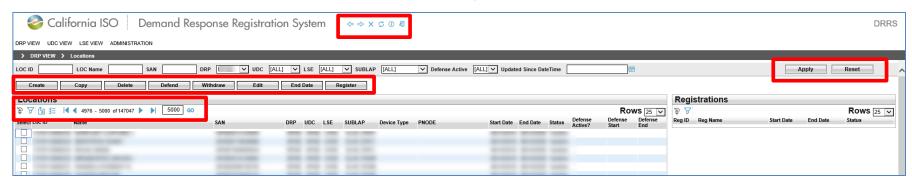


Reminder: DRRS UI Upgrade features

Current Production/Pre-Fall 2020 Release



Fall 2020 Release currently in MAP-Stage:





Automated Dispatch System (ADS) replacement

- Timeline: July 27 September 04
- Structured: August 11 (Completed)

Structured Scenarios document -

http://www.caiso.com/Documents/MarketSimulationScenarios

-ADSReplacement.pdf



Dispatch operating target tariff clarification

- Timeline: July 27 September 04
- Structured: August 12 (Completed)

Structured Scenarios document -

http://www.caiso.com/Documents/MarketSimulationScenarios

-DispatchOperatingTargetTariffClarification.pdf



FERC Order No. 841 requested adjustments

- Timeline: July 27 September 04
- Structured: August 12 (Settlement processing in progress)

Structured Scenarios document -

http://www.caiso.com/Documents/FERC841RequestedAdjustmentsMarketSimulationStructuredScenariosFall2020.pdf



Energy storage and distributed energy resources phase 3

- Timeline: July 27 September 04
- Structured: August 19
- Setup needed:
 - PDR-LSR Curtailment.
 - If market participant wants to see only energy award, then, submit very cheap energy bids
 - If market participant wants to see AS award, say Spin, submit very expensive energy bids and 0\$ Spin bid
 - PDR-LSR Consumption.
 - Avoid submitting large negative energy bid. Suggested bid around \$ -1

Structured Scenarios document -

http://www.caiso.com/Documents/ESDER3MarketSimulation ScenariosFall2019.pdf



Energy imbalance market enhancements 2020

- Timeline
 - Phase 1: August 31 TBD
 - Phase 2: September 21 TBD
- Structured: N/A market simulation will now be tested as unstructured with a CAISO issued guide for market participants

Structured Scenarios document - http://www.caiso.com/Documents/MarketSimulationScenarios EnergyImbalanceMarket2020Enhancements.pdf



Energy imbalance market enhancements 2020

System	Phase 1: 8/31	Phase 2: 9/21
ВААОР	 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) 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 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) 	Fix/Improve SVG One Lines. Request to be able to view SE and telemetry values for all substation flows and elements
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 	N/A
RTM	 Publish the data of the MW infeasibility data and ABC Up and Down Dispatches of RTPD/RTD Publish the effective ETSR import and export limits for the market run for RTPD and RTD Support Pump Storage for EIM BAAs 	 Publish the effective load conforming for the market run for RTPD and RTD for Binding and Advisory
CMRI	 Display and publish, download the data of the MW infeasibility data and ABC Up and Down Dispatches of RTPD/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. Only upstream has changes with regards to the data that is sends to CMRI. 	 Display and publish, download the data of the effective load conforming for the market run for RTPD and RTD for 1.CMRI Load Conforming Binding rpt 2. CMRI Load Conforming Advisory rpt



Commitment Costs and Default Energy Bid Enhancements

• Timeline: July 27 – September 04



Commitment cost enhancements tariff clarifications

• Timeline: July 27 – September 04



Market settlement timeline transformation

- Timeline: July 27 September 18
- Structured: August 25
- Note:
 - MSTT cutover TD 8/24/20 (Corresponds to Production TD 1/1/21)
 - Phase 2 (MSTT, EBTMP) Structured Scenarios first Settling TD 8/25

Structured Scenarios document -

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



Excess behind the meter production

- Timeline: July 27 September 18
- Structured: August 25
- Note:
 - MP needs to submit meter data by 8/28 for initial and 9/2 for Recalc statement
 - MSTT cutover TD 8/24/20 (Corresponds to Production TD 1/1/21)
 - Phase 2 (MSTT, EBTMP) Structured Scenarios first Settling TD 8/25

Structured Scenarios document -

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



Next Steps

 The next teleconference is scheduled on Monday, August 17 at 1400 PDT



Reference Slides



Market Simulation Issue Management

- Submit all issues to the CIDI case management system
- CIDI tickets must have "Functional Environment" =
 "Market Simulation Fall 2020" to be reviewed by ISO
 SMEs



ISO Market Simulation Support

- Hours: Monday thru Friday 0900-1800 PDT
- ISO's 24x7 Service Desk: (916) 351-2309 (Connectivity
 UI or API)
 - Issues called in after hours will be worked on during the next business day
- Email: MarketSim@caiso.com



Fall 2020 Release Communication Plan

Schedule

Monday	Tuesday	Thursday
July 27	September 8	July 23, 30
August 3, 10, 17, 24, 31		August 6,13, 20, 27
September 14		September 3, 10, 17
-		-

Connection Information

Web Conference Information

Web Address: https://caiso.webex.com/meet/MarketSim

Meeting Number: 962 067 710

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.

Conference Call Information

Dial-in Number: 866-528-2256

International Dial-in: 216-706-7052

Access Code: 202 249 0



Structured Scenario Registration Details

MP's will need to register their request with the ISO to participate in this simulation via the MarketSim@caiso.com mailbox.

Date of registration July 3, 2020.

We will do our best to accommodate for late registration



Fall 2020 Release MAP Stage Connectivity Testing

- Timeline Phase 1: July 27 August 10
- Timeline Phase 2: July 27 August 10



Settlements Calendar

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Fall 2020 Release - System Interface Changes

ADS				
Project	Change Type	Summary	Technical Specifications	MAP Stage
N/A	Decom	Decommission of deprecated versions	v8.2.0	7/27/20
ADS Replacement DOTTC	Modity	APIWebService v8 APIResponseWebService v8	v8.2.0	7/27/20

DRRS				
Project	Change Type	Summary	Technical Specifications	MAP Stage
		SubmitDRLocations_DRRSv2_AP		7/20/20
		SubmitDRLocations_DRRSv2_DocAttach_AP		
		SubmitDRRegistrations_DRRSv2_AP		
ESDER3B	Modify	SubmitDRRegistrations_DRRSv2_DocAttach_AP	v3.2	
ESDEKSB	iviouity	RetrieveDRLocations_DRRSv2_AP		
		RetrieveDRLocations_DRRSv2_DocAttach_AP		
		RetrieveDRRegistrations_DRRSv2_AP		
		RetrieveDRRegistrations_DRRSv2_DocAttach_AP		

MRI-S						
Project	Change Type	Summary	Technical Specifications	MAP Stage		
ЕВТМР	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	v2.5 Page 31	7/27/20		



Fall 2020 Release - System Interface Changes

Master File								
Project	Change	Change Type	Summary	Technical Specifications	MAP Stage			
ESDER3B	Add enumeration to GRDT: DR_TYPE of PDR_LSR		RetrieveGeneratorRDT_MFRDv5					
FERC841 RA	New GRDT attribute: Apply Wholesale Charge		RetrieveGeneratorRDT_MFRDv5_DocAttach					
EIM2020	New GRDT attribute: Meter Data Interval							
Other	Remove from GRDT: MIN_DISP_LEVEL	Modify	SubmitGeneratorRDT_MFRDv5	v6.2	8/4/20			
CCE Tariff	New GRDT attribute: Run of River	lviouity	SubmitGeneratorRDT_MFRDv5_DocAttach	VO.2	0/4/20			
Slow DR	New GRDT attribute: Slow DR		GRDT 14.0					

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Fall 2020 Release - System Interface Changes

CMRI					
Project	Change Type	Summary	Technical Specifications	MAP Stage	
N/A	Decom	Decommission of deprecated versions	v3.9.7	8/17/20	
EIM2020	IINI (DAN)	RetrieveEIMInfeasibility_CMRIv1_AP RetrieveEIMInfeasibility_CMRIv1_DocAttach_AP	v3.9.7	8/17/20	
EIM2020	IIXIAM	RetrieveLoadConforming_CMRIv1_AP RetrieveLoadConforming_CMRIv1_DocAttach_AP	v3.9.7	8/17/20	
EIM2020	New	Available Balance Capacity	v3.9.7	8/17/20	
EIM2020	New	Advisory Load Conforming	V3.9.7	TBD	

OASIS				
Project	Change Type	Summary	Technical Specifications	MAP Stage
N/A	Decom	Decommission of deprecated versions	v5.1.14	7/28/20
EBTMP	New	ENE_EBTMP_PERF_DATA	v5.1.14	7/28/20

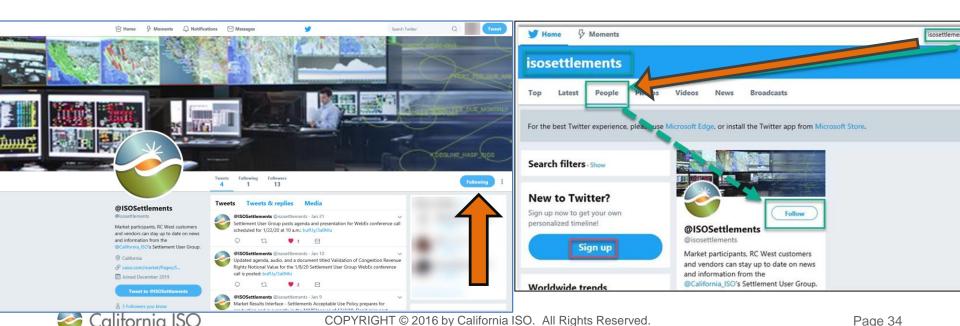
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Introducing ISO Settlements Twitter Tool for Market Sim Updates

- Market sim updates will be made available
- Note: Will not replace any existing media communications
- Please take the opportunity to follow <u>@ISOSettlements on Twitter</u> by downloading the Twitter application to **any mobile device**
- Twitter feed can be accessed on any web browser
- No account required to view the Twitter feed and posts



Updates that are tweeted

Tweets Information

- Market Simulation MAP-STAGE Master File UI and API available for Fall 2020 Release connectivity
- http://www.caiso.com/Pages/documentsby group.aspx?GroupID=25991DEB-2F25-4976-8958-4F04745A59AA

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