Market Simulation Call - Fall 2020 Release

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Recordings

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.

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

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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	Participants are not able use ADS APIs using MAP Stage ECN	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)

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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](#)

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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/ESDER3MarketSimulationScenariosFall2019.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/MarketSimulationScenariosEnergyImbalanceMarket2020Enhancements.pdf

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Energy imbalance market enhancements 2020

System	Phase 1: 8/31	Phase 2: 9/21
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) • 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

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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

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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

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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

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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

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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

Calendar Day	CMRI T+1B		Publish Initial Statement T+4B	Meter Data Due T+4B Statement	Publish Initial statement T+6B	Publish Recalc Statement T+8B	Meter data due for T+70B statement	Publish Recalc Statement T+9B	Publish Market Invoice
		Submit Meter Data by T+3B 18:00 for T+9B Initial	T+3B Initial. Estimated by DReAMS. No Meter Data submission	Submit Meter Data by T+4B 18:00 for Recalc	T+9B Initial. Includes Estimation		Submit Meter Data by T+6B 18:00 for Recalc	T+70B Recalculation	
			INITIAL (Current MSTT)	Current MSTT	INITIAL (New MSTT)	RECALC1 (Current MSTT)	New MSTT	RECALC (New MSTT)	
29-Jul-20	28-Jul								
30-Jul-20	29-Jul								
03-Aug-20			28-Jul	28-Jul					
04-Aug-20			29-Jul	29-Jul					
05-Aug-20	4-Aug		Monthly Initial 28-Jul - 29-Jul						Daily Initial 28-Jul, 29-Jul Monthly Initial 28-Jul - 29-Jul
06-Aug-20	5-Aug								
07-Aug-20						28-Jul			
10-Aug-20			4-Aug	4-Aug		29-Jul			
11-Aug-20			5-Aug	5-Aug		Monthly Recalc 28-Jul - 29-Jul			
12-Aug-20	11-Aug		Monthly Initial 4-Aug - 5-Aug						Daily Recalc 28-Jul, 29-Jul Monthly Recalc 28-Jul - 29-Jul Daily Initial 4-Aug, 5-Aug Monthly Initial 4-Aug - 5-Aug
13-Aug-20	12-Aug								
14-Aug-20						4-Aug			
17-Aug-20			11-Aug	11-Aug		5-Aug			
18-Aug-20			12-Aug	12-Aug		Monthly Recalc 4-Aug - 5-Aug			

Settlements Calendar

Calendar Day	CMRI T+1B	Submit Meter Data by T+3B 18:00 for T+9B Initial	Publish Initial Statement T+4B / T+3B Initial. Estimated by DReAMS. No Meter Data submission / INITIAL (Current MSTT)	Meter Data Due T+4B Statement / Submit Meter Data by T+4B 18:00 for Recalc / Current MSTT	Publish Initial statement T+6B / T+9B Initial. Includes Estimation / INITIAL (New MSTT)	Publish Recalc Statement T+8B / RECALC1 (Current MSTT)	Meter data due for T+70B statement / Submit Meter Data by T+6B 18:00 for Recalc / New MSTT	Publish Recalc Statement T+9B / T+70B Recalculation / RECALC (New MSTT)	Publish Market Invoice
19-Aug-20	18-Aug		Monthly Initial 11-Aug - 12-Aug			`			Daily Recalc 4-Aug, 5-Aug Monthly Recalc 4-Aug - 5-Aug Daily Initial 11-Aug, 12-Aug Monthly Initial 11-Aug - 12-Aug
20-Aug-20	19-Aug								
21-Aug-20						11-Aug			
24-Aug-20			18-Aug	18-Aug		12-Aug			
25-Aug-20			19-Aug	19-Aug		Monthly Recalc 11-Aug - 12-Aug			
26-Aug-20	25-Aug		Monthly Initial 18-Aug - 19-Aug						Daily Recalc 11-Aug, 12-Aug Monthly Recalc 11-Aug - 12-Aug Daily Initial 18-Aug, 19-Aug Monthly Initial 18-Aug - 19-Aug
27-Aug-20	26-Aug								
28-Aug-20		25-Aug				18-Aug			
31-Aug-20		26-Aug				19-Aug			
01-Sep-20						Monthly Recalc 18-Aug - 19-Aug			
02-Sep-20	1-Sep				25-Aug			25-Aug	
03-Sep-20	2-Sep				26-Aug			26-Aug	

Calendar Day	CMRI T+1B	Submit Meter Data by T+3B 18:00 for T+9B Initial	Publish Initial Statement T+4B — T+3B Initial. Estimated by DReAMS. No Meter Data submission — INITIAL (Current MSTT)	Meter Data Due T+4B Statement — Submit Meter Data by T+4B 18:00 for Recalc — Current MSTT	Publish Initial statement T+6B — T+9B Initial. Includes Estimation — INITIAL (New MSTT)	Publish Recalc Statement T+8B — RECALC1 (Current MSTT)	Meter data due for T+70B statement — Submit Meter Data by T+6B 18:00 for Recalc — New MSTT	Publish Recalc Statement T+9B — T+70B Recalculation — RECALC (New MSTT)	Publish Market Invoice
02-Sep-20	1-Sep				25-Aug		25-Aug		
03-Sep-20	2-Sep				26-Aug		26-Aug		
04-Sep-20		1-Sep			Monthly Initial 25-Aug - 26-Aug				
08-Sep-20		2-Sep						25-Aug	
09-Sep-20								26-Aug	Daily Initial 25-Aug, 26-Aug Monthly Initial 25-Aug - 26-Aug / Daily Recalc 18-Aug, 19-Aug Monthly Recalc 18-Aug - 19-Aug
10-Sep-20					1-Sep		1-Sep	Monthly Recalc 25-Aug - 26-Aug	
11-Sep-20					2-Sep		2-Sep		
14-Sep-20					Monthly Initial 01-Sep - 02-Sep				
16-Sep-20								1-Sep	Daily Initial 01-Sep , 02-Sep Monthly Initial 01-Sep - 02-Sep / Daily Recalc 25-Aug, 26-Aug Monthly Recalc 25-Aug - 26-Aug
17-Sep-20								2-Sep	
18-Sep-20								Monthly Recalc 01-Sep - 02-Sep	Daily Recalc 01-Sep , 02-Sep Monthly Recalc 01-Sep - 02-Sep

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 | Modify | APIWebService v8
APIResponseWebService v8 | **v8.2.0** | 7/27/20 |

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

MRI-S				
Project	**Change Type**	**Summary**	**Technical Specifications**	**MAP Stage**
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 | **v2.5**

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

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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	New	RetrieveEIMInfeasibility_CMRIv1_AP RetrieveEIMInfeasibility_CMRIv1_DocAttach_AP	**v3.9.7**	8/17/20
EIM2020	New	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 [@ISOSettlements on Twitter](#) 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/documentsbygroup.aspx?GroupID=25991DEB-2F25-4976-8958-4F04745A59AA

⌘ Submit updates to us: twitter.com/isosettlements.com

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