Market Simulation - Fall 2022 Release

Anshuman Vaidya

Sep 19, 2022

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

- Fall 2022 MAP Stage Availability
- Fall 2022 MAP Stage Connectivity Testing
- Fall 2022 Market Simulation Initiatives & Timelines
- Fall 2022 - System Interface Changes
- Initiatives
  - Central procurement entity
  - Flexible ramping product - deliverability
  - Hybrid resources phase 2B
  - Reliability demand resource response phase 2
- Known issues
- Next Steps

Fall 2022 MAP Stage Availability

- Refer to MAP Stage portal https://portalmap.caiso.com for system availability information

- Current MAP Stage Scheduled Maintenance
  - None

- Upcoming MAP Stage Scheduled Maintenance
  - 9/23 CMRI tentative
  - 9/23 OASIS tentative

California ISO

Fall 2022 MAP Stage Connectivity Testing

- **Timeline:**
  - Start TD 8/22 – 9/22

- Available for Connectivity
  - ALFS Submit/Retrieve SCVERForecast
  - MF 9/19

- Upcoming for Connectivity
  - CMRI 9/26
  - OASIS 9/26

California ISO

Fall 2022 Market Simulation Initiatives & Timelines

Fall 2022 Initiatives	Start Date	Start Date (Trade Date)	End Date	Structured Simulation Start (Trade Date)
Fall 2022 Market Simulation	08/30/22	08/30/22	10/14/22	
Central procurement entity	09/19/22	09/22/22		09/22/22
Flexible ramping product – deliverability	09/26/22	09/26/22		09/27 & 10/6
Hybrid resources phase 2B	09/28/22	09/29/22		10/04/22
Reliability demand resource response phase 2	09/19/22	09/19/22		09/29/22

Market Simulation Plan:
https://www.caiso.com/Documents/MarketSimulationPlan-Fall2022Release.pdf

California ISO

2022 - System Interface Changes

System	Release	Project	API Service Name & Major Version, Artifacts	MAP-Stage	Production	Technical Specifications
SIBR	2022 Independent	Trans. Svc. & Mkt Sched. Priorities Ph. 1	New: SC of PT Export New: SC of supporting resource	✓ 5/5/22 - UI API TBD	✓ 6/1/22 - UI API TBD	TBD
MF	Fall 2022	Hybrid Resources 2B	SubmitGeneratorRDT_MFRDv5_20211001 RetrieveGeneratorRDT_MFRDv5_20211001	✓	Deployed	✓
MF	Fall 2022	Hybrid Resources 2B	• RDT Definitions v17 DRAFT: • GRDT v17 Changes: • RESOURCE tab: • HYBRID_COMPONENTS tab: (Hybrid Resource Phase 2-B, activation date moved to Fall 2022) • Add fields: MIN_CONT_ENERGY_LIMIT, MAX_CONT_ENERGY_LIMIT, ENERGY_EFFIC	✓ 9/19/22	*12/1/22*	✓ Drafts 5/24/22
SIBR	Fall 2022	Hybrid Resources 2B	SubmitDynamicResourceLimitsData_SIBRv1 RetrieveDynamicResourceLimitsData_SIBRv1	October	*12/1/22*	✓ Artifacts 2/2/22 ✓ Tech Spec 2/8/22
ALFS	Fall 2022	Hybrid Resources 2B	SubmitSCVERForecast_ALFSv1 RetrieveSCVERForecast_FDRv1	✓ 8/22/22	*12/1/22*	✓ 5/25/22

California ISO

2022 - System Interface Changes

System	Release	Project	API Service Name & Major Version, Artifacts	MAP-Stage	Production	Technical Specifications
CMRI	Fall 2022	Hybrid Resources 2B	Modify: RetrieveEIRForecast_CMRIv1_AP - 20220401 Modify: RetrieveEIRForecast_CMRIv1_DocAttach_AP – 20220401	9/23/22	*12/1/22*	✓ 7/15/22
CMRI	Fall 2022	Hybrid Resources 2B	New: RetrieveAggregatedCapabilityConstraintDefinition_CMRIv1_AP New: RetrieveAggregatedCapabilityConstraintDefinition_CMRIv1_DocAttach_AP	9/23/22	*12/1/22*	✓ 7/15/22
~~CMRI~~	~~Fall 2022~~	~~FRP Improvements – Deliverability~~	~~Resource Nodal prices for the FRP awards~~ Will leverage existing API & UI functionality for FRP products (FRU/FRD) – No changes need for UI & API functionality; Users can continue to use existing UI/API functionality as is.	9/23/22	*12/1/22*	~~N/A~~
OASIS	Fall 2022	Hybrid Resources 2B	Include constraint in the Scheduling Constraint Shadow Prices report • New: Aggregate Capability Constraint Shadow Prices; ACC_SHDW_PRC	9/23/22	*12/1/22*	✓ 7/15/22
OASIS	Fall 2022	FRP Improvements – Deliverability	Demonstrate the variability of locational pricing for FRU/FRD. • New: Flex Ramp Requirements Input Uncertain Histogram; FLEX_RAMP_REQ_INP_HSG • New: Flex Ramp Requirement Input - Polynomials; FLEX_RAMP_REQ_INP_POLYNOMIALS • New: Flex Ramp Requirement Threshold; FLEX_RAMP_REQ_THRESH • New: Flexible Ramp Test Result Groups; FLEX_RAMP_TEST_RESULT_GROUP • New: Flexible Ramping Nodal Prices; FLEX_RAMP_NODAL_PRC • New: Flexible Ramping Constraint Shadow Prices; FLEX_RAMP_CNSTR_SHDW_PRC • New: Flexible Ramping Scheduling Constraint Shadow Prices; FLEX_RAMP_SCH_CNSTR_SHDW_PRC • New: Flexible Ramping Forecasts; FLEX_RAMP_FCST • Flexible Ramp Surplus Demand Curve; ENE_FLEX_RAMP_DC	9/23/22	*12/1/22*	✓ 7/15/22

https://developer.caiso.com

California ISO

Flexible ramping product - deliverability

- **Timeline:** 09/23 - 10/14
- **Scenarios :** 09/27 & 10/6

Scenarios document -
https://www.caiso.com/Documents/Market-Simulation-Structured-Scenarios-Flexible-Ramping-Product.pdf

Central Procurement Entity

- **Timeline:** 09/19 - 09/30
- **Structured:** 9/22
- RA Data copy date – 9/12-9/13
- Submit provisioning requests to MapStage - 9/8
- RA plan submission date – 9/14-9/21
- Submit provisioning requests to Production - 10/3

Scenarios Document –

https://www.caiso.com/Documents/Market-Simulation-Structured-Scenarios-Central-Procurement-Entity.pdf

Central Procurement Entity Access Provisions

- Submit provisioning requests to MapStage - 9/8
- Submit provisioning requests to Production - 10/3
- CPE must obtain the services of a certified Scheduling Coordinator (SC)
- SC will need to request a new SCID to represent the CPE and indicate the CPE name in the request
- The new SCID is approved to be setup in master file and a CPE ID is created and assigned for the CPE to be associated to the new SCID
- Contact SCRequests@caiso.com for questions

Hybrid resources phase 2B

- **Timeline:** 09/28 - 10/14
- **Scenarios:** 10/4

- Scenarios document –
  https://www.caiso.com/Documents/MarketSimulationStructuredScenarios-HybridResourcesP2.pdf

California ISO

Hybrid Resources 2B: ALFS API Access Provisions

- **User Access Administrators (UAAs) are able to provision access for to these new roles:**

  - **Submits**
    - **AIM > Application: ALFSSOA > Role: SC WRITE EXTERNAL**
  - **Retrieves**
    - **AIM > Application: FDR > Role: SC READ EXTERNAL**

- **References**
  - https://developer.caiso.com
  - Technical Specification
  - Artifacts
    - SubmitSCVERForecast_ALFSv1_AP
    - SubmitSCVERForecast_ALFSv1_DocAttach_AP
    - RetrieveSCVERForecast_FDRv1_AP
    - RetrieveSCVERForecast_FDRv1_DocAttach_AP
  - URLs
    - https://wsmap.caiso.com/sst/runtime.asvc/SubmitSCVERForecast_ALFSv1_AP
    - https://wsmap.caiso.com/sst/runtime.asvc/SubmitSCVERForecast_ALFSv1_DocAttach_AP
    - https://wsmap.caiso.com/sst/runtime.asvc/RetrieveSCVERForecast_FDRv1_AP
    - https://wsmap.caiso.com/sst/runtime.asvc/RetrieveSCVERForecast_FDRv1_DocAttach_AP

Reliability demand resource response phase 2

- **Timeline:** 09/19 - 10/14
- **Scenarios :** 09/29

Scenarios document - https://www.caiso.com/Documents/MarketSimulationStructuredScenarios-ReliabilityDemandResponseResourcesPhase2.pdf

Known Issues

- **Pending CIDI Tickets**
  - CMRI report query for FRP project – *Pending SME review*

California ISO

Next Steps

- The next teleconference is scheduled on September 22 at 1400 PDT

California ISO

References

ISO Market Simulation Support

- **Hours:** Monday thru Friday 0900-1800 PDT

- **ISO's 24x7 Service Desk:** (916) 351-2309 (Connectivity – UI or API)

- **Email:** MarketSim@caiso.com

Market Simulation Issue Management

- Submit all issues to the CIDI case management system
- CIDI tickets must have "**Functional Environment**" = "**Market Simulation Fall 2022**" to be reviewed by ISO SMEs

Fall 2022 Communication Plan

- ## Schedule

Monday	Tuesday	Thursday
Aug 22, 29 Sep 12, 19, 26	Sep 26	Aug 18, 25 Sep 01, 08, 15, 22, 29

- ## 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:
      - 1-844-517-1271 (Toll Free)
      - 1-682-268-6591
    - Access Code: 962 067 710

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 August 12, 2022.

We will do our best to accommodate for late registration

Fall 2022 Market Simulation Settlements Calendar

California ISO

Fall2022 Market Sim Calendar (MAP STAGE)
Aug 22, 2022 through September 30, 2022

Calendar Day	Day	CMRI T+1B	Submit Meter Data by T+2B 10:00 for Initial	Publish Initial Statement T+5B	Submit Meter Data by T+5B 18:00 for Recalc	Publish Recalc Statement T+8B	Publish Market Invoice
			T+9B	T+9B	T+70B	T+70B	
22-Aug-22	Monday						
23-Aug-22	Tuesday						
24-Aug-22	Wednesday	23-Aug					
25-Aug-22	Thursday		23-Aug				
26-Aug-22	Friday	25-Aug					
27-Aug-22	Saturday						
28-Aug-22	Sunday						
29-Aug-22	Monday		25-Aug				
30-Aug-22	Tuesday			23-Aug	23-Aug		
31-Aug-22	Wednesday	30-Aug					
01-Sep-22	Thursday		30-Aug	25-Aug	25-Aug		
02-Sep-22	Friday					23-Aug	
03-Sep-22	Saturday						
04-Sep-22	Sunday						
05-Sep-22	Monday			Cal ISO Holiday			
06-Sep-22	Tuesday						
07-Sep-22	Wednesday	6-Sep		30-Aug	30-Aug	25-Aug	
08-Sep-22	Thursday		6-Sep	Monthly Initial 23-Aug - 30-Aug			Daily Initial 23-Aug; Daily Initial 25-Aug; Daily Initial 30-Aug; Monthly Initial 23-Aug - 25-Aug
09-Sep-22	Friday	8-Sep					
10-Sep-22	Saturday						
11-Sep-22	Sunday						
12-Sep-22	Monday		8-Sep			30-Aug	
13-Sep-22	Tuesday			6-Sep	6-Sep	Monthly Recalc 23-Aug - 30-Aug	Daily Recalc 23-Aug; Daily Recalc 25-Aug; Daily Recalc 30-Aug; Monthly Recalc 23-Aug - 25-Aug
14-Sep-22	Wednesday	13-Sep					
15-Sep-22	Thursday		13-Sep	8-Sep	8-Sep		
16-Sep-22	Friday	15-Sep		Monthly Initial 6-Sep - 8-Sep		6-Sep	Daily Initial 6-Sep; Daily Initial 8-Sep; Monthly Initial 6-Sep - 8-Sep
17-Sep-22	Saturday						
18-Sep-22	Sunday						
19-Sep-22	Monday		15-Sep				
20-Sep-22	Tuesday			13-Sep	13-Sep	8-Sep	
21-Sep-22	Wednesday	20-Sep				Monthly Recalc 6-Sep - 8-Sep	Daily Recalc 6-Sep; Daily Recalc 8-Sep; Monthly Recalc 6-Sep - 8-Sep
22-Sep-22	Thursday		20-Sep	15-Sep	15-Sep		
23-Sep-22	Friday	22-Sep		Monthly Initial 13-Sep - 15-Sep		13-Sep	Daily Initial 13-Sep; Daily Initial 15-Sep; Monthly Initial 13-Sep - 15-Sep
24-Sep-22	Saturday						
25-Sep-22	Sunday						
26-Sep-22	Monday		22-Sep				
27-Sep-22	Tuesday			20-Sep	20-Sep	15-Sep	
28-Sep-22	Wednesday	27-Sep				Monthly Recalc 13-Sep - 15-Sep	Daily Recalc 13-Sep; Daily Recalc 15-Sep; Monthly Recalc 13-Sep - 15-Sep
29-Sep-22	Thursday		27-Sep	22-Sep	22-Sep		
30-Sep-22	Friday	29-Sep		Monthly Initial 20-Sep - 22-Sep		20-Sep	Daily Initial 20-Sep; Daily Initial 22-Sep; Monthly Initial 20-Sep - 22-Sep

Market Simulation Settlements Calendar Fall 2022 :
https://www.caiso.com/Documents/MarketSimulationSettlementsCalendar-Fall2022Release.pdf

California ISO