

# Market Simulation – Kickoff Call Fall 2022

Anshuman Vaidya Market Simulation Lead

Aug 18, 2022

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# Agenda

- ISO Market Simulation Support
- Market Simulation Issue Management
- Fall 2022 Communication Plan
- Fall 2022 MAP Stage Availability
- Fall 2022 MAP Stage Connectivity Testing
- Fall 2022 Market Simulation Initiatives & Timelines
- Fall 2022 Market Simulation Settlements Calendar
- Structured Scenario Registration Details
- Fall 2022 System Interface Changes
- Initiatives
  - Central procurement entity
  - Flexible ramping product deliverability
  - Hybrid resources phase 2B
  - Reliability demand resource response phase 2
- Next Steps



# **ISO Market Simulation Support**

- Hours: Monday thru Friday 0900-1800 PDT
- ISO's 24x7 Service Desk: (916) 351-2309 (Connectivity – UI or API)
- Email: <u>MarketSim@caiso.com</u>



#### 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		Aug 18, 25
Sep 12, 19, 26	Sep 26	Sep 01, 08, 15, 22,
		29

#### Connection Information

- Web Conference Information
  - Web Address: <u>https://caiso.webex.com/meet/MarketSim</u>
  - 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



# Fall 2022 MAP Stage Availability

- Refer to MAP Stage portal <u>https://portalmap.caiso.com</u> for system availability information
- Current MAP Stage Scheduled Maintenance

– None

MAP Stage Weekly Maintenance Window
 – Friday



# Fall 2022 MAP Stage Connectivity Testing

#### • Timeline:

- Start TD 8/22 - 8/29



# Fall 2022 Market Simulation Initiatives & Timelines

Fall 2022 Initiatives	Start Date	<u>Start Date</u> (Trade Date)	End Date	Structured Simulation Start (Trade Date)
Fall 2022 Market Simulation	08/30/22	08/30/22	09/30/22	
Central procurement entity	09/19/22	09/22/22		09/22/22
Flexible ramping product – deliverability	09/15/22	09/19/22		09/19/22
Hybrid resources phase 2B	09/06/22	09/06/22		09/06/22
Reliability demand resource response phase 2	09/19/22	09/19/22		09/19/22

#### Market Simulation Plan:

https://www.caiso.com/Documents/MarketSimulationPlan-Fall2022Releases.pdf



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# Fall 2022 Market Simulation Settlements Calendar

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Fall2022 Market Sim Calendar (MAP STAGE)

Aug 22, 2022 through September 30, 2022

	Submit Meter Data Submit Meter Data						
Calendar Day	Day	CMRI T+1B	by T+2B 10:00 for Initial	Publish Initial Statement T+5B	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		1.30	1.35	11100	11100	
23-Aug-22	Tuesday						
24-Aug-22	Wednesday	23-Aug					
25-Aug-22	Thursday	20-Aug	23-Aug				
26-Aug-22	Friday	25-Aug	20 Aug				
27-Aug-22	Saturday	20 Aug					
28-Aug-22	Sunday						
29-Aug-22	Monday		25-Aug				
30-Aug-22	Tuesday		23 Aug	23-Aug	23-Aug		
31-Aug-22	Wednesday	30-Aug		23 Aug	20 Aug		
01-Sep-22	Thursday	JU-Aug	30-Aug	25-Aug	25-Aug		
02-Sep-22	Friday		30-Aug	25-A0g	20-Aug	23-Aug	
03-Sep-22	Saturday					20 Adg	
04-Sep-22	Sunday						
05-Sep-22	Monday		I		Cal ISO Holiday		
06-Sep-22	Tuesday						
07-Sep-22	Wednesday	6-Sep		30-Aug	30-Aug	25-Aug	
08-Sep-22	Thursday	0.000		SO Adg	JO Aug	20 A0g	Daily Initial 23-Aug; Daily Initial 25-Aug;
	,						Daily Initial 30-Aug;
			6-Sep	Monthly Initial 23-Aug - 30-Aug			Monthly Initial 23-Aug - 25-Aug
09-Sep-22	Friday	8-Sep	0-360	Monthly Initial 23-Adg - 30-Adg			Monally Initial 25-Aug - 25-Aug
10-Sep-22	Saturday	o-sep					
11-Sep-22	Sunday						
12-Sep-22	Monday		8-Sep			30-Aug	
13-Sep-22	Tuesday		0.000			55 145	Daily Recalc 23-Aug; Daily Recalc 25-Aug;
	,						Daily Recalc 30-Aug;
				6-Sep	6-Sep	Monthly Recalc 23-Aug - 30-Aug	Monthly Recalc 23-Aug - 25-Aug
14-Sep-22	Wednesday	13-Sep		0.00	0.000	monthly needle 20 Mag 00 Mag	montally needle 20 mag 20 mag
15-Sep-22	Thursday	10.000	13-Sep	8-Sep	8-Sep		
16-Sep-22	Friday		10 000	0.00	0.000		Daily Initial 6-Sep; Daily Initial 8-Sep;
		15-Sep		Monthly Initial 6-Sep - 8-Sep		6-Sep	Monthly Initial 6-Sep - 8-Sep
17-Sep-22	Saturday	15 000		monthly materie sep to sep		0.000	montany militar o ocp o ocp
18-Sep-22	Sunday						
19-Sep-22	Monday		15-Sep				
20-Sep-22	Tuesday		15 665	13-Sep	13-Sep	8-Sep	
21-Sep-22	Wednesday			10 000	10 000	0000	Daily Recalc 6-Sep; Daily Recalc 8-Sep;
		20-Sep				Monthly Recalc 6-Sep - 8-Sep	Monthly Recalc 6-Sep - 8-Sep
22-Sep-22	Thursday	20-3ep	20-Sep	15-Sep	15-Sep	Monthly Recard 0-3ep - 8-3ep	Montany Recard 0-Sep - 8-Sep
23-Sep-22	Friday		20.000	25.000	10.000		Daily Initial 13-Sep; Daily Initial 15-Sep;
		22-Sep		Monthly Initial 13-Sep - 15-Sep		13-Sep	Monthly Initial 13-Sep, Daily Initial 13-Sep, Monthly Initial 13-Sep - 15-Sep
24-Sep-22	Saturday	22 SCP		montany mater to sep 13-sep		10.000	monthly mitter to dep 10-dep
25-Sep-22	Sunday						
26-Sep-22	Monday		22-Sep				
27-Sep-22	Tuesday		22-36p	20-Sep	20-Sep	15-Sep	
28-Sep-22	Wednesday			20 300	20 300	19.900	Daily Recalc 13-Sep; Daily Recalc 15-Sep;
		27-Sep				Monthly Recalc 13-Sep - 15-Sep	Monthly Recalc 13-Sep - 15-Sep
29-Sep-22	Thursday	27-30p	27-Sep	22-Sep	22-Sep	Monany Recard 19-3ep - 19-3ep	montany Record 15-5ep - 15-5ep
30-Sep-22	Friday		27-36p	22-3cp	22-3cp		Daily Initial 20-Sep; Daily Initial 22-Sep;
and a set of the		29-Sep		Monthly Initial 20-Sep - 22-Sep		20-Sep	Monthly Initial 20-Sep, Darry Initial 22-Sep,
		25-3ch		monuny muar zo-sep - zz-sep	1	20-3ep	monuny muai zo-sep - zz-sep

Market Simulation Settlements Calendar Fall 2022 :

https://www.caiso.com/Documents/MarketSimulationSettlementsCalendar-

FallReleases2022.pdf



#### **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



### 2022 - System Interface Changes

Syste m	Release	Project	API Service Name & Major Version, Artifacts	MAP-Stage	Production	Technical Specifications
SIBR	2022 Independent		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	1	Deployed	✓
MF	Fall 2022	Hybrid Resources 2B	<ul> <li><u>RDT Definitions v17 DRAFT</u>:</li> <li><u>GRDT v17</u></li> <li>Changes:</li> <li>RESOURCE tab:</li> <li>HYBRID_COMPONENTS tab: (Hybrid Resource Phase 2-B, activation date moved to Fall 2022)</li> <li>Add fields: MIN_CONT_ENERGY_LIMIT, MAX_CONT_ENERGY_LIMIT, ENERGY_EFFIC</li> </ul>	8/22/22	11/1/22	✓ <u>Drafts</u> 5/24/22
SIBR	Fall 2022	Hybrid Resources 2B	SubmitDynamicResourceLimitsData_SIBRv1 RetrieveDynamicResourceLimitsData_SIBRv1	TBD	11/1/22	<ul> <li>Artifacts 2/2/22</li> <li>Tech Spec 2/8/22</li> </ul>
ALFS	Fall 2022	Hybrid Resources 2B	SubmitSCVERForecast_ALFSv1 RetrieveSCVERForecast_FDRv1	8/22/22	11/1/22	✓ 5/25/22

https://developer.caiso.com

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# 2022 - System Interface Changes

Syste m	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	Sep 2022	11/1/22	✓ 7/15/22
CMRI	Fall 2022	Hybrid Resources 2B	New: RetrieveAggregatedCapabilityConstraintDefinition_CMRIv1_AP New: RetrieveAggregatedCapabilityConstraintDefinition_CMRIv1_DocAttach_AP	Sep 2022	11/1/22	✓ 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.	Sep 2022	11/1/22	<del>N/A</del>
OASIS	Fall 2022	Hybrid Resources 2B	Include constraint in the Scheduling Constraint Shadow Prices report <ul> <li>New: Aggregate Capability Constraint Shadow Prices; ACC_SHDW_PRC</li> </ul>	Sep 2022	11/1/22	✓ 7/15/22
OASIS	Fall 2022	FRP Improvements – Deliverability	<ul> <li>Demonstrate the variability of locational pricing for FRU/FRD.</li> <li>New: Flex Ramp Requirements Input Uncertain Histogram; FLEX_RAMP_REQ_INP_HSG</li> <li>New: Flex Ramp Requirement Input - Polynomials; FLEX_RAMP_REQ_INP_POLYNOMIALS</li> <li>New: Flex Ramp Requirement Threshold; FLEX_RAMP_REQ_THRESH</li> <li>New: Flexible Ramp Test Result Groups; FLEX_RAMP_TEST_RESULT_GROUP</li> <li>New: Flexible Ramping Nodal Prices; FLEX_RAMP_NODAL_PRC</li> <li>New: Flexible Ramping Scheduling Constraint Shadow Prices; FLEX_RAMP_CNSTR_SHDW_PRC</li> <li>New: Flexible Ramping Forecasts; FLEX_RAMP_FCST</li> <li>Flexible Ramp Surplus Demand Curve; ENE_FLEX_RAMP_DC</li> </ul>	Sep 2022	11/1/22	✓ 7/15/22



# Central Procurement Entity

- Timeline: 09/19 09/30
- Structured: 9/22

Structured Scenarios Document - To be published



Flexible ramping product - deliverability

- Timeline: 09/15- 09/30
- Structured: 09/19

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



#### Hybrid resources phase 2B

- Timeline: 09/06- 09/30
- **Structured:** 09/06
- Structured Scenarios document <u>https://www.caiso.com/Documents/MarketSimulationStructuredS</u> <u>cenarios-HybridResourcesP2.pdf</u>



Reliability demand resource response phase 2

- Timeline: 09/19 09/30
- Structured: 09/19

Structured Scenarios document https://www.caiso.com/Documents/MarketSimulationStructure dScenarios-ReliabilityDemandResponseResourcesPhase2.pdf





 The next teleconference is scheduled on August 22 at 1400 PDT



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