



Market Simulation – Independent Releases 2022

Anshuman Vaidya
Market Simulation Lead

May 16, 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

- Independent Releases 2022 MAP Stage Availability
- Independent Releases 2022 System Interface Changes
- Independent Releases 2022 Market Simulation Initiatives & Timelines
- Initiatives
 - Transmission Service and Market Scheduling Priorities – Phase 1
 - WEIM Resource Sufficiency Evaluation Enhancements Phase 1A
 - OMS Framework to WebVision
- Next Steps

Independent Releases 2022 MAP Stage Availability

- Refer to MAP Stage portal <https://portalmap.caiso.com> for system availability information
- Current MAP Stage Scheduled Maintenance
 - OMS 5/13 thru 5/16
- MAP Stage Weekly Maintenance Window
 - Friday

Independent Releases 2022 - System Interface Changes

System	Release	Project	API Service Name & Major Version, Artifacts	MAP-Stage	Technical Specifications
SIBR	2022 Independent	N/A (Was FERC831)	RetrieveEnergyBidData_SIBR_v1_AP	5/16/22	✓ 14.0; 7/29/21
SIBR	2022 Independent	Trans. Svc. & Mkt Sched. Priorities Ph. 1	New: SC of PT Export New: SC of supporting resource	✓ 5/5/22 (UI)	May 2022
OASIS	2022 Independent	Trans. Svc. & Mkt Sched. Priorities Ph. 1	New: ENE_SCH_REDUCTION New: ENE_LOAD_ADJUSTMENT	5/17/22 (UI)	✓ 7.1.0; 3/24/22 ✓ 7.1.1; 4/11/22
RTM	2022 Independent	Resource Sufficiency Eval. Enh. Ph. 1	SubmitDemandResponseData_RTmv1	5/19/22 (UI)	TBD
OASIS	2022 Independent	Resource Sufficiency Eval. Enh. Ph. 1	New: WEIM_RSE_CAPACITY_TEST New: WEIM_RSE_FLEX_RAMP_TEST	Jun 2022 (UI)	✓ 7.1.0; 3/24/22 ✓ 7.1.1; 4/11/22
CMRI	2022 Independent	Resource Sufficiency Eval. Enh. Ph. 1	New: ResourceBidCapacityData_v1	Jun 2022 (UI)	✓ 4/20/22
SIBR	2022 Independent	RDRR Bidding Enhancements Phase 1	Rules Only	✓ 4/12/22	✓ Rules v11.5 3/29/22

Independent Releases 2022 Market Simulation Initiatives & Timelines

<u>Independent Releases 2022 Initiatives</u>	<u>Start Date</u>	<u>Start Date (Trade Date)</u>	<u>End Date</u>	<u>Structured Simulation Start (Trade Date)</u>
<u>Independent Releases 2022 Market Simulation</u>	04/19/22	04/19/22		04/19/22
Transmission Service and Market Scheduling Priorities-Phase 1	05/10/22	05/10/22	06/07/22	05/10 – Scenario 1 05/26 – Scenario 2,3
WEIM Resource Sufficiency Evaluation Enhancements Phase 1A	05/19/22			
OMS Framework to WebVision	5/10	N/A	5/23	N/A

Market Simulation Plan:

<https://www.caiso.com/Documents/MarketSimulationPlan-Independent2022Releases.pdf>

Transmission Service and Market Scheduling Priorities – Phase 1

- **Timeline:** May 10 – June 07
- **Structured:** May 10 – Scenario 1
May 26 – Scenario 2,3
- **Trading Hours:** HE 13 - HE 16

Structured Scenarios document -

<https://www.caiso.com/Documents/MarketSimulationStructuredScenarios-TransmissionServiceandMarketSchedulingPriorities-Phase1.pdf>

Transmission Service and Market Scheduling Priorities

– Phase 1

Milestone Type	Milestone Name	Dates	Status
Market Sim	Market Sim Window	May 5, 2022 – May 20, 2022	
	SIBR UI available in MAPSTAGE	May 5, 2022	✓
	SIBR API available in MAPSTAGE	TBD	
	Scenario 1	May 10, 2022	✓
	OASIS UI available in MAPSTAGE	May 17, 2022	
	OASIS API available in MAPSTAGE	TBD	
	Scenario 2, 3	May 26, 2022	

WEIM Resource Sufficiency Evaluation Enhancements Phase 1A

- **Timeline:**
 - Settlements Connectivity: TD March 31 – May 18, 2022
 - Settling every Tuesday and Thursday TD in MAP-Stage thru the end of May
 - For over/under charge code TD 3/29 does have the ISO being allocated to, and starting with TD 3/31, settlements RSEE1 is effective, where ISO is NOT being allocated to
 - Market Simulation: Start May 19, 2022
- **Structured Scenarios document -**
<https://www.caiso.com/Documents/Market-Simulation-Scenarios-WEIM-Resource-Sufficiency-Evaluation-Enhancements-Phase1A.pdf>

WEIM Resource Sufficiency Evaluation Enhancements

Phase 1A

RSEE ID	Description	System	Market Simulation Impact
RSEE-1010	Consideration of Supply Conditions in the Capacity Test	Market	
RSEE-1020	Flexible Ramping Test Modifications – PBC	Market	Yes
RSEE-1030	Consider a Resource's Transition through FOR in the Flexible Ramping Test.	Market	
RSEE-1040	RSE Modifications – Storage Resources Treatment	Market	
RSEE-1050	Balancing Test Modifications	Settlements	Yes
RSEE-1060	DR Inclusion with RSE	Market, BAAOP	Yes
RSEE-1070	Reliability of CAISO Interchange Schedules	Market	
RSEE-1090	Increased RSE Data on RSE Results and Additional Data Transparency and Reporting	OASIS	
RSEE-1100	Increased WEIM Entities Situational Awareness Regarding Test Performance	Market, CMRI, OASIS	
RSEE-1110	Net-Load Uncertainty Calculation Removal from Capacity Test	Market	
RSEE-1120	Intertie Uncertainty Calculation Removal from Capacity Test	Market	

Group	System / Interface	MAP-Stage	Production
1	Settlements	Effective as of TD 3/31/22	TD 6/1/22
1	Market	5/19/22	6/1/22
1	BAAOP UI	5/19/22	6/1/22
2	OASIS UI	May 2022	TBD
2	CMRI UI	May 2022	TBD
3	BAAOP API	TBD	TBD
3	OASIS API	TBD	TBD
3	CMRI API	TBD	TBD

OMS Framework to WebVision

Why?

- Microsoft Silverlight reached the end of support on October 12, 2021

What to expect?

- Dependency on Silverlight and IE11. webVision will support Chrome, Edge and FireFox. IE11 is initially supported, but is not recommended.
- webVision framework changes will impact application menu, main page header, look and feel of ALL displays.
- Adds new framework features (e.g., Favorites)
- No data migration was involved and there is no change to business logic

Notice – Silverlight no longer available for download

The California ISO will be upgrading the **Outage Management System (webOMS)** platform from Microsoft Silverlight to WebVision late May 2022. This will allow WebOMS users to access the application through other web browsers outside of Internet Explorer 11; therefore, discontinuing the dependency for Microsoft Silverlight.

Currently, **Microsoft Silverlight** has reached the **end of support** and is **no longer available for download**. This blocks users with new machines from downloading the Silverlight program from Microsoft.

To prevent impacts to webOMS for users with workstation refreshed prior to the upgrade to WebVision, the recommendation is to contact your IT Support to obtain a copy of the Silverlight program so that it can be installed onto your computer. This also applies to new users needing to access the webOMS application.

The California ISO does not provide copies of the Microsoft Silverlight program.

Timeline: MAPSTAGE May 10, Production May 24, 2022

The ISO has published supporting documentation.

OMS Framework to WebVision

The California ISO has deployed the webVision upgrade for the **Outage Management System (webOMS)** application in the **MAP Stage** environment **May 10, 2022**.

There is a new UI framework look and feel but the data logic and functionality remains the same.

The training presentation document for webVision is available on the **ISO Developer** site at <https://developer.caiso.com> > Apps > OMS > Resources > Transition from Silverlight and IE 11 to webVision

- For **MAP Stage**, users are to become familiar with the new webVision UI framework in webOMS. Please do not verify any downstream systems at this time (e.g. BAAOP, etc.).
- For **Production**, webVision will be upgraded in webOMS by late May 2022. Additional communication will be sent out as we get closer to the date.

We have identified some known defects in the new webVision UI framework in MAP Stage and are working to resolve before production implementation. **If you encounter any issues outside of the items listed below, please submit a CIDI ticket.**

Known webVision UI issues:

1. Login screen presented when multiple instance of same cert is used.
2. OMS dashboard does not allow users to extend quadrants on the splash page.
3. The RIMS Data tab is missing from Outage Entry screen.
4. Outage Entry screen does not allow copy paste of Resource ID.
5. WebVision - Nonmarket payloads are not broadcasting in MAP Stage.
6. Unable to create a JOU (Joint Owned Unit) Outage.
7. GANTT chart screen is not loading from Outage Data drop down.
8. Grouping Configuration is missing from external facing screens for participants.

Next Steps

- The next teleconference is scheduled on May 19 at 1400 PDT

Reference Slides

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 Summer 2022**” to be reviewed by ISO SMEs

Independent Releases 2022 Communication Plan

- **Schedule**

<i>Monday</i> April 11, 18, 25 May 2, 9, 16	<i>Thursday</i> April 7, 14, 21, 28 May 5, 12, 19
--	--

- **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 April 07, 2022.

We will do our best to accommodate for late registration

Independent Releases 2022 MAP Stage Connectivity Testing

- **Timeline:**
 - Start TD 3/31 – 5/18 for RSEE1 Settlements

Independent Releases 2022 Market Simulation Settlements Calendar

California ISO		Spring 2022 Market Sim Calendar (MAP STAGE) April 4, 2022 through May 20, 2022					
Calendar Day	Day	CMRI T+1B	Submit Meter Data by T+2B 10:00 for Initial T+9B	Publish Initial Statement T+5B T+9B	Submit Meter Data by T+5B 18:00 for Recalc T+70B	Publish Recalc Statement T+8B T+70B	Publish Market Invoice
04-Apr-22	Monday						
05-Apr-22	Tuesday						
06-Apr-22	Wednesday	5-Apr					
07-Apr-22	Thursday		5-Apr				
08-Apr-22	Friday	7-Apr					
09-Apr-22	Saturday						
10-Apr-22	Sunday						
11-Apr-22	Monday		7-Apr				
12-Apr-22	Tuesday			5-Apr	5-Apr		
13-Apr-22	Wednesday	12-Apr					
14-Apr-22	Thursday		12-Apr	7-Apr	7-Apr		
15-Apr-22	Friday	14-Apr					Daily Initial 05-Apr-07-Apr; Monthly Initial 05-Apr-07-Apr
16-Apr-22	Saturday			Monthly Initial 05-Apr-07-Apr		5-Apr	
17-Apr-22	Sunday						
18-Apr-22	Monday		14-Apr				
19-Apr-22	Tuesday			12-Apr	12-Apr	7-Apr	
20-Apr-22	Wednesday	19-Apr				Monthly Recalc 05-Apr-07-Apr	Daily Recalc 05-Apr-07-Apr; Monthly Recalc 05-Apr-07-Apr
21-Apr-22	Thursday		19-Apr	14-Apr	14-Apr		Daily Initial 12-Apr-14-Apr; Monthly Initial 12-Apr-14-Apr
22-Apr-22	Friday	21-Apr		Monthly Initial 12-Apr-14-Apr		12-Apr	
23-Apr-22	Saturday						
24-Apr-22	Sunday						
25-Apr-22	Monday		21-Apr				
26-Apr-22	Tuesday			19-Apr	19-Apr	14-Apr	
27-Apr-22	Wednesday	26-Apr				Monthly Recalc 12-Apr-14-Apr	Daily Recalc 12-Apr-14-Apr; Monthly Recalc 12-Apr-14-Apr
28-Apr-22	Thursday		26-Apr	21-Apr	21-Apr		
29-Apr-22	Friday	28-Apr		Monthly Initial 19-Apr-21-Apr		19-Apr	Daily Initial 19-Apr-21-Apr; Monthly Initial 19-Apr-21-Apr
30-Apr-22	Saturday						
01-May-22	Sunday						
02-May-22	Monday		28-Apr				
03-May-22	Tuesday					21-Apr; Monthly Recalc 19-Apr-21-Apr	Daily Recalc 19-Apr-21-Apr; Monthly Recalc 19-Apr-21-Apr
04-May-22	Wednesday	3-May		26-Apr	26-Apr		
05-May-22	Thursday		3-May	28-Apr	28-Apr		
06-May-22	Friday	5-May		Monthly Initial 26-Apr-28-Apr		26-Apr	Daily Initial 26-Apr-28-Apr; Monthly Initial 26-Apr-28-Apr
07-May-22	Saturday						
08-May-22	Sunday						
09-May-22	Monday		5-May				

Market Simulation Settlements Calendar Independent Releases 2022 :
<https://www.caiso.com/Documents/MarketSimulationSettlementsCalendar-IndependentReleases2022.pdf>

Reliability Demand Response Resource Bidding Enhancements – Phase 1

- **Timeline:** April 12 – May 6
- **Structured:** April 19, 21

Structured Scenarios document - <https://www.caiso.com/Documents/MarketSimulationStructuredScenarios-ReliabilityDemandResponseResourceBiddingEnhancements-Track-1.pdf>