

Market Simulation – Independent 2018 & Spring 2019 Releases

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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
- Independent 2018 & Spring 2019 Releases Market Simulation Initiatives & Timelines
- Initiatives
 - Congestion Revenue Rights Auction Efficiency 1B
 - Energy Imbalance Market 2019 Balancing Authority of Northern California / Sacramento Municipal Utility District
- Known Issues
- Next Steps



Independent 2018 & Spring 2018 Releases 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
 - None
- MAP Stage Weekly Maintenance Window
 - Monday 0700 PT thru Tuesday 0900 PT



Independent 2018 & Spring 2019 Releases Market Simulation Initiatives & Timelines

Independent 2018 release and Spring 2019 Release Initiatives	Start Date	Start Date (Trade Date)	End Date	Structured Simulation Start (Trade Date)	Expected Participation
CRR Auction Efficiency – 1B	11/5	11/5	12/18	11/19	ISO Market Participants EIM Market Participants
EIM 2019 BANC / SMUD	12/3	12/4	1/31	12/4	ISO Market Participants EIM Market Participants

Market Simulation Plan:

http://www.caiso.com/Documents/MarketSimulationPlan-Independent2018-Spring2019Releases.pdf



CRR Auction Efficiency – 1B

- Timeline: November 5 December 18
 - - ISO will re-execute the CRR1B structured scenarios for TDs 12/4 & 12/5, to publish initial Settlements by 12/10, 12/11, and 12/12 to provide MPs with more data to review
 - Market Simulation Plan updated accordingly: http://www.caiso.com/Documents/MarketSimulationPlan-lndependent2018-Spring2019Releases.pdf



CRR Auction Efficiency – 1B (continued)

- Modified BRS published 11/29
 - Updates to clarify CRR ID numbering and use of SCID in lieu of BAID
 - clarify and update requirements to the current setup we have for market simulation in MAP Stage
 - should not result in any integration changes for market participants
 - BRQ042A
 - shows impact to the CRRS system (internal ISO system not exposed to MPs)
 - included because data will go downstream and show in Settlements
 - Settlements associated Config Guide does not require any changes as it already uses SCID rather than BAID
 - BRQ401
 - shows a change to the CMRI system
 - associated Tech Spec, from 9/11/18, already reflects SCID instead of BAID (sections 50.2 and 50.3 already references SCID instead of BAID)
 - see http://www.caiso.com/Documents/CMRI-
 InterfaceSpecification v3 8 1Clean Fall2018Release.pdf
 - http://www.caiso.com/Documents/BusinessRequirementSpecification-CongestionRevenueRightsAuctionEfficiency1B.pdf



CRR Auction Efficiency – 1B (continued)

- CRR Data for Scenarios
 - MPs able to obtain from MAP Stage CRR MUI
 - Report: Private / Existing CRR
 - Report is forward-looking; December data only available thru end of December
- Mapping to a Transmission Constraint ID where a DLAP / SLAP is the Source Financial Node
 - Authorized participants have access to ISO shift factor and load distribution factor files on the MPP.
 - In addition, all participants have access to ISO load distribution factor files on OASIS.
 - The shift factor file relates a constraint to a Pnode.
 - The OASIS load distribution factor file relates a LAP (CLAP, SLAP, DLAP, etc) to a Pnode.
 - The portal load distribution factor file relates a DLAP to a Pnode.
 - The portal load distribution factor file contains the dynamic values used by the day-ahead market, and is thus more accurate than the OASIS file, which uses static values.
- Mapping reports available to map the CRR Financial Node to a Constraint ID
 - The CRR Inventory report on OASIS lists all CRRs. The report contains the Pnode or APnode of the source and sink. These nodes can be mapped to the constraint using the files referenced in answer above.



EIM 2019 BANC / SMUD

- Timeline: December 3 January 31
 - Structured Scenarios:

http://www.caiso.com/Documents/MarketSimulationStructuredScenarios-BANC-SMUD.pdf



EIM 2019 BANC / SMUD (continued)

Structured Scenario Test Status

	Scenario	Description	Planned Execution	Actual Execution	Status	Date Passed (includes Settlement)	Comments
	1	DAM Feasibility Test Results	12/4/2018	12/4/2018	Passed	12/4/2017	Execution Passed
	2	BAA fails Flex ramp sufficiency test upward direction	12/4/2018	12/4/2018			RT Execution Passed
Week 1	3	BAA fails Flex ramp sufficiency test downward direction	12/4/2018	12/4/2018			RT Execution Passed
	11	EIM Entity BAA Isolation	12/5/2018	12/5/2018			RT Execution Passed
	12	Impact of Real Time Unit Commitment on EIM Entity	12/5/2018	12/5/2018			RT Execution Passed



MAP Stage Known Issues

System	Summary	Status	Estimated Fix Date	CIDI#
CCE3	CCE3 Oct. 3 RAAIM Exemption - On Oct. 3 MONTHLY INITIAL	Pending	N/A	207875
	MARKET settlement statement, units were assessed RAAIM	Customer		
	charges although a Other_Use_Limit_Reached and Annual	Review		
	_Use_Limit_Reached outage card were submitted.			
CCE3	CCE3 Start-up Opportunity Cost missing?	Under Review	TBD	208054
	In reviewing the translation of opportunity cost values			
	between CAISO systems as have found a case where we do not			
	believe a resource start up opportunity cost is being included			
	correctly for cost recovery.			
CRR1B CMRI	CMRI CRR Revenue Adjustment Report - endEffectiveDate	Resolved – Fix	11/20	208756
	mapping issue, API Response not as per Request	applied		
CRR1B OASIS	OASIS data uniqueness for INTERVAL_START_GMT timestamp	Resolved – Fix applied	11/20	208710
OASIS	MAP OASIS BAA Market Events question on GROUP column	Under Review	TBD	208995
CRR1B	Mkt Sim Daily Recalc TD 11/19/18 Constraint ID Question &	Under Review	TBD	209022
	CMRI data not matching Stmt	Shaci heview		203022
CCE3	CMRI Resource Opportunity Cost DAM and RTM data identical,	Under Review	TBD	209032,
	and have same start dates			209036
		1		



Next Steps

 The next teleconference is scheduled on Monday, December 10 at 1400 PT



Reference Slides



Market Simulation Support

- Hours: Monday thru Friday 0900-1800 PT
- Market Simulation Coordinator Phone: (916) 351-2205
- 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 cases must have "Functional Environment" = "Market Simulation" to be reviewed by ISO SMEs



MAP Stage Environment Data

- MAP Stage Bids: Static Data Timelines:
 - DAM bids submitted for T+4 (example: on 9/10 bids are submitted for 9/14)
 - MPs wishing to check and or submit bids for T+1 T+4) can do so after 7am PT on T. (example T=9/10 - DA bids can be submitted for 9/11, 9/12, 9/13 and if after 7am PT for 9/14)
 - In the example no seeded bids will over-write submitted bids for T+1, T+2, T+3. For T+4 if the submitted bids come in after 7am they will not be over-written by seeded bids
 - RTM bids are submitted for T+1 at 11am PT (example: on 9/10 static bids are submitted at 11am PT for 9/11)
 - Participants wishing to check and or submit bid for T+1 can do so after 12pm PT
 - no seeded data will over-write submitted bids.
- SIBR RTM functionality for validating submitted bids or generating submitted bid based on DA market results will still apply, typically MAP Stage market results are not published until after 12pm PT.
- All RTM bids are revalidated at 22:10 PT for the next day based on latest commitment cost data received
- Bids must be submitted or verified by participants wanting to validate functionality in SIBR or downstream applications with regard to project expectations



Independent 2018 & Spring 2019 Releases Communication Plan

Schedule

Monday	Thursday		
All occurrences 1400-1500 PT			
November 5, 12, 19, 26	November 1 (first), 8, 15, 29		
December 3, 10, 17 (last)	December 6, 13		

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



Stay Informed



Ways to participate in releases

- Visit the Release Planning page
 - http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx
- Attend meetings
 - Release Users Group (RUG) bi-weekly meetings
 - Initiative status updates
 - System change updates on independent releases
 - Market Simulation calls
 - Visit the ISO calendar at <u>www.caiso.com</u> for meeting dates and times and add events to your calendar
 - Typically held on Mondays and Thursdays
 - Market sim calls for major releases will be market noticed
 - Market Performance and Planning Forum
 - Bi-monthly review of market performance issues
 - High level discussion of release planning, implementation and new market enhancements



What to look for on the calendar...

Calendar of Meetings, Training and Events Month: February ✓ Year: 2018 ✓ Calendar View List View Print View February 2018 4 F day today Mon Sun Wed Thu Fri Sat **Market Sim** ≜₀ WebCONF: Deadline: Training: 🙎 Meeting: Training: Market Simulation Get to Know the ISO - Day 1 Comments -Audit Com mittee Settlements 201 Interconnection Process Teleconference (Executive) En han cem ents 2018 - Is sue 9:00am - 4:00pm Paper and Meeting 8:30am - 9:30am • A VALCONE: Dis cus sion im balance Conformance Training: Enhance ments Settlements 101 Training: Get to Know the ISO - Day 2 10:00am - 12:00pm 9:00am - 4:00pm Mab CONF: Meeting: ▲ Meeting: 2017-2018 Transmission Te chnical User Group Planning Process Flexible Resource 10:00am - 11:00am Adequacy Criteria Must 10:00am - 4:00pm Offer Obligation Phase 2 -Revised Draft Flexible Market Sim Nabconf: Capacity Framework Market Simulation 10:00am - 4:00pm 2:00pm - 3:00pm ≜₀ V\b b CONF: Market Settlement User Group 10:00am - 11:00am Deadline: Deadline: Numbconf: Meeting: Participating Transmission Congestion Revenue Rights Submissions - April 2018 Comments - Review Owner Per Unit Cost Auction Efficiency Monthly Resource Transmission Access Release Users Group Guides Adequacy and Supply Plans Charge Structure Straw 10:00am - 4:00pm Proposal and Meeting 10:00am - 12:00pm Dis cus sion (RUG) Maconf: Congestion Revenue Rights 20) WebCONF: Release User Group Market Simulation Board of Governors 11:00am - 11:20am 10:00am - 11:00am Teleconference (General) 2:00pm - 3:00pm Lo Vabconf: Outage Management 8:16am - 9:00am Energy imbalance Market System Customer Governing Body Partnership Group Teleconference (Executive) Board of Governors 2:00pm - 3:00pm Teleconference (Executive) 11:30am - 12:30pm 9:00am - 10:00am Call: Market Update 10:16am - 11:00am Mabconf: Market Simulation

