



# Market Simulation – Independent 2018 & Spring 2019 Releases

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December 10, 2018

# 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

<b><u>Independent 2018 release and Spring 2019 Release Initiatives</u></b>	<b><u>Start Date</u></b>	<b><u>Start Date (Trade Date)</u></b>	<b><u>End Date</u></b>	<b><u>Structured Simulation Start (Trade Date)</u></b>	<b><u>Expected Participation</u></b>
<b>CRR Auction Efficiency – 1B</b>	11/5	11/5	12/18	11/19	ISO Market Participants EIM Market Participants
<b>EIM 2019 BANC / SMUD</b>	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
  - Structured Scenarios TDs 11/19 & 11/20; and TDs 12/4 & 12/5:  
<http://www.caiso.com/Documents/StructuredScenarios-CongestionRevenueRightsAuctionEfficiency-1B.pdf>
    - ISO re-executed 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-Independent2018-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/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
Week 1	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
	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 MARKET settlement statement, units were assessed RAAIM charges although a Other_Use_Limit_Reached and Annual_Use_Limit_Reached outage card were submitted.	Pending Customer Review for TD 12/4, settlements publish 12/12	N/A	207875
CCE3	CCE3 Start-up Opportunity Cost missing?  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.	Under Review	TBD	208054
CRR1B CMRI	CMRI CRR Revenue Adjustment Report - endEffectiveDate mapping issue, API Response not as per Request	Resolved – Fix applied, data corrected for settled TDs 11/19, 11/20	11/20, 12/7	208756
CRR1B OASIS	OASIS data uniqueness for INTERVAL_START_GMT timestamp	Resolved – Fix applied, data corrected for settled TDs 11/19, 11/20	11/20, 12/7	208710
OASIS	MAP OASIS BAA Market Events question on GROUP column	Clarification provided – Pending Customer Review	N/A – Clarification only	208995
CRR1B	Mkt Sim Daily Recalc TD 11/19/18 Constraint ID Question & CMRI data not matching Stmt	Under Review	TBD	209022
CCE3	CMRI Resource Opportunity Cost DAM and RTM data identical, and have same start dates	Clarification provided – Pending Customer Review	N/A – Clarification only	209032

# Next Steps

- The next teleconference is scheduled on **Thursday, December 13** 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](mailto: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**

<b>Monday</b>	<b>Thursday</b>
<b>All occurrences 1400-1500 PT</b>	
November 5, 12, 19, 26 December 3, 10, <i>17 (last)</i>	November <i>1 (first)</i> , 8, 15, 29 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 [www.caiso.com](http://www.caiso.com) 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						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	<p><b>Market Sim</b></p> <p>WebCONF: Market Simulation 2:00pm - 3:00pm</p>	<p>Training: Get to Know the ISO - Day 1 9:00am - 4:00pm</p> <p>WebCONF: Imbalance Conformance Enhancements 10:00am - 12:00pm</p> <p>WebCONF: Technical User Group 10:00am - 11:00am</p>	<p>Deadline: Comments - Interconnection Process Enhancements 2018 - Issue Paper and Meeting Discussion 9:00am - 4:00pm</p> <p>Training: Get to Know the ISO - Day 2 9:00am - 4:00pm</p> <p>Meeting: Flexible Resource Adequacy Criteria Must Offer Obligation Phase 2 - Revised Draft Flexible Capacity Framework 10:00am - 4:00pm</p> <p>WebCONF: Market Settlement User Group 10:00am - 11:00am</p>	<p>Meeting: Audit Committee Teleconference (Executive) 3:30pm - 6:30pm</p> <p>Training: Settlements 101 9:00am - 4:00pm</p> <p>Meeting: 2017-2018 Transmission Planning Process 10:00am - 4:00pm</p> <p><b>Market Sim</b></p> <p>WebCONF: Market Simulation 2:00pm - 3:00pm</p>	<p>Training: Settlements 201 9:00am - 4:00pm</p>	
<p>WebCONF: Participating Transmission Owner Per Unit Cost Guides 10:30am - 12:00pm</p> <p>WebCONF: Market Simulation 2:00pm - 3:00pm</p> <p><b>Release Users Group (RUG)</b></p>	<p>Meeting: Congestion Revenue Rights Auction Efficiency 10:00am - 4:00pm</p> <p>WebCONF: Release User Group 10:00am - 11:00am</p> <p>Call: Energy Imbalance Market Governing Body Teleconference (Executive) 11:30am - 12:30pm</p>	<p>Deadline: Submissions - April 2018 Monthly Resource Adequacy and Supply Plans 11:00am - 11:30am</p> <p>Call: Congestion Revenue Rights 11:00am - 11:30am</p> <p>WebCONF: Outage Management System Customer Partnership Group 2:00pm - 3:00pm</p>	<p>Deadline: Comments - Review Transmission Access Charge Structure Straw Proposal and Meeting Discussion 3:15pm - 6:00pm</p> <p>Call: Board of Governors Teleconference (General) 9:00am - 10:00am</p> <p>Call: Board of Governors Teleconference (Executive) 9:00am - 10:00am</p> <p>Call: Market Update 10:15am - 11:00am</p> <p>WebCONF: Market Simulation</p>			