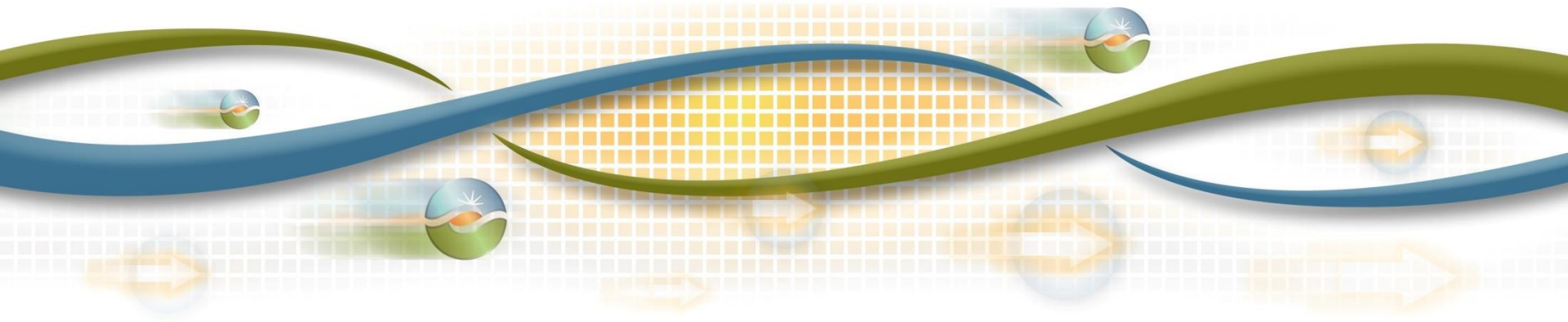




Market Simulation – Independent 2017 Releases

Christopher McIntosh
Lead Market Simulation Coordinator

Independent 2017 Releases Market Simulation
October 23, 2017



Agenda

- Independent 2017 MAP Stage Availability
- Independent 2017 Market Simulation Initiatives and Timelines
- External Interface Change Summary
- Initiatives -
 - Independent 2017 -
 - Bidding Rules Enhancements - Part B
 - Known Issues List
 - Independent 2017 Settlements
 - Gas Burn Report
- MAP Stage Deployments
- Next Steps
- Reference Slides

Independent 2017 Release MAP Stage Availability

Current MAP Stage Scheduled Maintenance –

- CMRI – Monday, October 23, 2017
- Potential CIRA offline for one week – October 23 - 27 or October 30 - November 3

MAP Stage Daily Maintenance Window - Tuesday, Wednesday and Thursday
16:00 – 20:00

MAP Stage Weekly Maintenance Window - Monday's 09:00 - Tuesday 09:00

Independent 2017 Release Market Simulation Initiatives and Timelines

<u>Independent 2017 Release Market Simulation</u>	<u>Start Date</u>	<u>Start Date (Trade Date)</u>	<u>End Date</u>	<u>Structured Simulation Start (Trade Date)</u>	<u>Expected Participation</u>
Bidding Rules Enhancements - Part B	9/22/2017	9/22/2017	Complete	N/A	EIM Entities and CAISO Market Participants

Market Simulation Plan –

http://www.caiso.com/Documents/MarketSimulationPlan_Fall_Independent2017Releases.pdf

External Interface Change Summary

Product View - CMRI UI and API changes

Release	Project	Change Type	External Impact	MP Action	UI Change	Service Name & Major Version	Minor Version	MAP Stage	Production Activation	Artifacts Package	Tech Spec Version
Fall 2017	BRE-B	New	CAISO & EIM Market	Adopt when ready	Tab: Default Bids New Report: Daily EPI Existing report: "EPI" will not have data when "Daily EPI" is activated	retrieveDailyElectricityPriceIndex_v1 retrieveDailyElectricityPriceIndex_v1_DocAttach	20171001	9/8/17	11/1/2017	v1.2 (Fall)	3.6.2
2017	Gas Burn	New	Gas Companies	Adopt when ready	New Tab: Gas Burn New Report: Gas Burn Detail	retrieveGasBurnResourceData_v1 retrieveGasBurnResourceData_v1_DocAttach	20171001	10/23/2017	11/1/2017	v1.1 (Fall)	3.6.1
2017	Gas Burn	New	Gas Companies	Adopt when ready	New Tab: Gas Burn New Report: Gas Burn Summary	retrieveGasBurnSummaryData_v1 retrieveGasBurnSummaryData_v1_DocAttach	20171001	10/23/2017	11/1/2017	v1.1 (Fall)	3.6.1
2017	EIM 2017	New	EIM Market	Adopt when ready	Tab: Default Bids New Report: Default Commitment Costs	retrieveExternalDefaultCommitmentCost_v1 retrieveExternalDefaultCommitmentCost_v1_Do cAttach	20171001	TBD (November 2017)	TBD (November 2017)	v1.0 (Fall)	3.6.0
2017	EIM 2017	Modify	EIM Market	Adopt when ready. API is backwards compatible	Tab: EIM New Report: EIM Bid Capacity	retrieveEIMBidCapacityPercentage_v2 retrieveEIMBidCapacityPercentage_v2_DocAttac h	20171001	10/23/2017	11/1/2017	v1.3 (To be released)	3.6.3 (To be released)
2017	Enhancement	Modify	CAISO & EIM Market	Adopt when ready. API is backwards compatible	Tab: EIM Existing Report: Base Schedules Tab: Real-Time Existing Report: RT Base Schedules	retrieveMarketBaseSchedules_v1 retrieveMarketBaseSchedules_v1_DocAttach retrieveEIMEntityMarketBaseSchedules_v1 retrieveEIMEntityMarketBaseSchedules_v1_Doc Attach	20171001	10/23/2017	11/1/2017	v1.2 (Fall)	3.6.2
2017	Enhancement	New	CAISO Market	Adopt when ready	Tab: Post-Market New Report: Regulation Pay for Performance	N/A	N/A	TBD (November 2017)	TBD (November 2017)	N/A	N/A
2017	Imperial Valley	New	PST Operators	Adopt when ready	Tab: Phase Shifter New Report	N/A	N/A	9/8/2017	11/16/2017	N/A	N/A
Winter 2017	EIM 2017	New	CAISO & EIM Market	Adopt when ready	Tab: EIM New Report: Resource Ramp Capacity	retrieveResourceRampCapacity_v1 retrieveResourceRampCapacity_v1_DocAttach	20180201	12/1/2017	4/1/2018	v1.0 (Winter)	4.0 (To be released)
Spring 2018	CCE3	New	CAISO Market	Adopt when ready	Tab: Default Bids New Report: Actual Limitation Values	retrieveActualLimitationValues_v1 retrieveActualLimitationValues_v1_DocAttach	20171001	March 2018	5/1/2018	v1.0 (Winter)	3.6.0 (Draft) 3.6.3 (Final)
Spring 2018	CCE3	New	CAISO Market	Adopt when ready	Tab: Default Bids New Report: Resource Opportunity Costs	retrieveResourceOpportunityCost_v1 retrieveResourceOpportunityCost_v1_DocAttach	20171001	March 2018	5/1/2018	v1.0 (Winter)	3.6.0 (Draft) 3.6.3 (Final)

External Interface Change Summary

Product View - OASIS UI and API changes

Release	Project	Change Type	External Impact	MP Action	UI Change	Web Service	MAP Stage	Production Activation	Artifacts Package	Tech Spec Version
2017	EIM 2017	New	EIM Market	Adopt when ready	Tab: Energy New Report: Flexible Ramp Requirements	ENE_EIM_FLEX_RAMP_INPUT	10/23/2017	11/1/2017	v1.2	5.1.1
2017	Gas Burn	New	Gas Companies	Adopt when ready	Tab: Atlas Reference New Report: Master Control Area Generating Capability List	ATL_GEN_CAP_LIST	10/23/2017	11/1/2017	v1.2	5.1.1
Winter 2017	EIM 2017	New	CAISO & EIM Market	Adopt when ready	Tab: Prices New Report: Hourly RTM LAP Prices	PRC_RTM_LAP	12/1/2017	4/1/2018	V1.2	5.1.1
Winter 2017	RSI	New	CAISO Market	Adopt when ready	Tab: Public Bids New Report: CSP Offer	PUB_CSP_OFFER_SET	12/5/2017	4/1/2018	V1.2	5.1.1

Independent 2017 Bidding Rules Enhancements – Part B

**The Bidding Rules Enhancements – Part B Market Simulation timeline –
BREB: Complete**

Independent 2017 Known Issues List

- None open at this time

Independent 2017 Settlements

Calendar Day	CMRI T+1B	Publish Initial Statement T+4B	Submit Meter Data by T+4B 18:00 for Recalc	Publish Recalc Statement T+8B	Publish Market Invoice
09-Oct-17					
10-Oct-17					
11-Oct-17					
12-Oct-17	11-Oct-17				
13-Oct-17					
14-Oct-17					
15-Oct-17					
16-Oct-17					
17-Oct-17		11-Oct-17	11-Oct-17		
18-Oct-17					
19-Oct-17					
20-Oct-17					
21-Oct-17					
22-Oct-17					
23-Oct-17				11-Oct-17 Price correction	11-Oct-17 R
24-Oct-17					
25-Oct-17					
26-Oct-17					
27-Oct-17					
28-Oct-17					
29-Oct-17					

Gas Burn Report

Gas Burn Report MAP Stage Availability: October 23, 2017

Next Steps

- The next teleconference will take place @ 14:00 PPT on Thursday, October 26, 2017

Reference Slides

ISO System Access Documentation

- http://www.caiso.com/Documents/SystemAccessInformation_MarketParticipants.pdf

ISO Market Simulation Support

- **Hours** - 09:00 - 18:00, PST (Monday through Friday)
- **Mkt Sim Coordinator Phone** - (916) 351-2248
- **ISO's 24X7 Help Desk** - (916) 351-2309 (Connectivity - GUI or API)
- **Email** - MarketSim@caiso.com

Market Simulation Issue Management

- Submit all issues to the CIDI case management system.
- CIDI tickets will need to have “Functional Environment” = **“Independent Market Simulation 2017”** to be reviewed by ISO SME’s.

Independent 2017 Release Market Simulation Communication Plan

Mondays:	Month	Dates	Time
	September	11, 18, 25	2:00 p.m. to 3:00 p.m. (Pacific Time)
Tuesday:	Month	Dates	Time
	September	5	1:30 p.m. to 2:30 p.m. (Pacific Time)
Thursdays:	Month	Dates	Time
	August	31	
	September	7, 14, 21, 28	2:00 p.m. to 3:00 p.m. (Pacific Time)

Connection Instructions

Please connect 5-10 minutes prior to the conference to allow time for a short download.

Web Conference Information

Web Address (URL): <http://ems7.intellor.com/login/713808>

Call-in: Audio connection instructions will be available after connecting to the web conference

Telephone-Only Participation

Please only use this dial-in method if unable to participate by web to ensure the ability to participate in Q&A

Call in: 877-369-5230, Access Code: 0267459#

Technical Support

AT&T Connect support at 1-888-796-6118

Independent 2017 CMRI ACL

The CMRI ACL Market Simulation timeline –

- **CMRI Access Control Resource Level:** Unstructured, August 28, 2017

User Guide and Training Materials -

<http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=EBFDD87D-9926-4BFE-8DBD-09AA3D1E5CC5>

Settlements RAAIM Production Defects Validation

Draft BPM is available under PRR 1012

External Validation Plan -

- Copy production data into map stage using trade dates 4/1/2017 to 4/7/2017
- In MAP Stage:
 - Calculate Daily and Monthly Initial statements using configuration without formula fixes, then publish to MRI-S
 - Calculate Daily and Monthly Recalc statements using configuration with new formula fixes, then publish to MRI-S

Data available for validation in MAP Stage MRI-S: September 12, 2017

- All the statements will be published and available in MAP-Stage on this date

Settlements RAAIM Production Defects Validation

Defect Summary List

#	System	Summary	CAISO Functionality Test	Available for Market Sim Validation
1	Settlements	Applying outage exemptions for non-Resource Specific System RA Resources	Passed	Yes
2	Settlements	Availability calculations for NGR REM with RA capacity	Passed	Yes
3	Settlements	Exempting RMR resources from RAAIM	Passed	No
4	Settlements	Resources being assessed in Real Time when it is a Long Start or Extremely Long Start resource, and also is eligible for RAAIM exemption for being a combined heat and power resource, QF resource, participating load that is pumping load, resource with acquired rights, or have pmax < 1.0 MW.	Passed	Yes
5	Settlements	BA_HRLY_RSRC_DA_REG_DOWN_AWARD@QUANTITY not showing in the Business Associate Bill Determinant Files	Passed	Yes

Known Issues List

#	System	Summary	Estimated Fix Date

- **No known issues at this time**