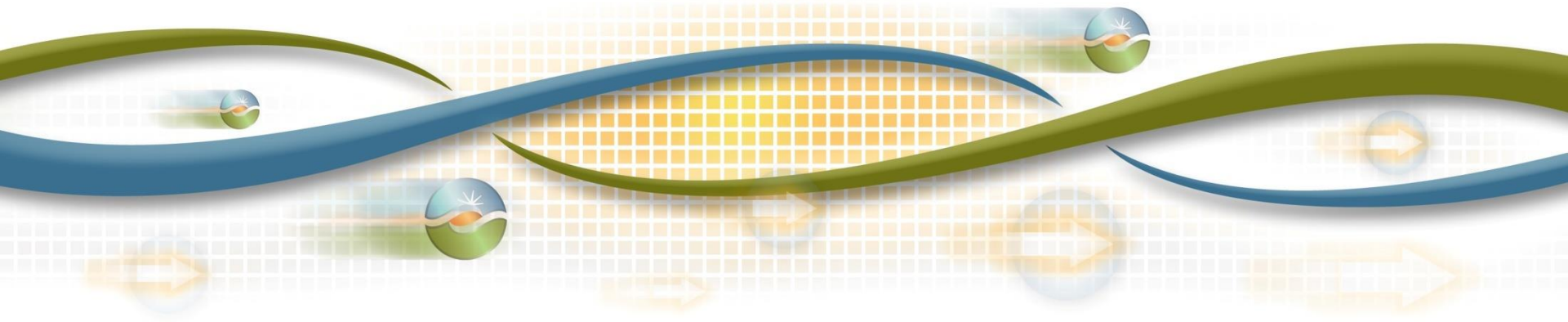# Market Simulation – Spring and Independent 2017 Releases

Christopher McIntosh

Lead Market Simulation Coordinator

Spring and Independent 2017 Releases Market Simulation

April 3, 2017

Agenda

- Spring and Independent 2017 MAP Stage Availability
- Spring and Independent 2017 Market Simulation Initiatives and Timelines
- Initiatives
    - LMPM Enhancements
    - PIRP System Decommissioning
    - MRI-S ACL Groups and CPG Enhancements
- Known Issues
- OMS Transmission Service Change
- Next Steps
- Reference Slides

Spring and Independent 2017 Releases MAP Stage Availability

MAP Stage Scheduled Maintenance –

Upcoming maintenance –
   MRI-S GUI only offline, available May 1, 2017
   CMRI offline, available April 3, 2017

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

MAP Stage Weekly Maintenance Window - Monday 08:00 – Tuesday 09:00

Please refer to the MAP Stage portal at https://portalmap.caiso.com for specific application availability information.

California ISO

Spring and Independent 2017 Releases Market Simulation Initiatives and Timelines

Spring and Independent 2017 Releases Initiatives	Start Date	Start Date (Trade Date)	End Date	Structured Simulation Start (Trade Date)	Expected Participation
Spring 2017 Release Market Simulation					
RTD LMPM	2/6/17	2/7/17	2/24/17	N/A	EIM Entities and ISO MPs
PIRP System Decommissioning	4/4/17	N/A	4/18/17	N/A	ISO MPs
Independent 2017 Release Market Simulation					
MRI-S ACL Groups and CPG Enhancements	3/13/17	N/A	5/26/17	N/A	EIM Entities and ISO MPs

Market Simulation Plan - http://www.caiso.com/Documents/MarketSimulationPlan_Spring_Independent2017Releases.pdf

Local Market Power Mitigation (LMPM) Enhancements Simulation

LMPM Enhancements Market Simulation timeline - Complete

CMRI Tech Spec –

http://www.caiso.com/Documents/CMRI-InterfaceSpecification_v3_5_4Clean_Fall2016Release.pdf

OASIS Tech Spec –

http://www.caiso.com/Documents/OASIS-InterfaceSpecification_v4_3_5Clean_Spring2017Release.pdf

OASIS LMPM Enhancements reports deployed to MAP Stage March 15, 2017 –

1. 1. PRC_MPM_RTM_NOMOGRAM_CMP RTD - now has data for TD 3/23 Intervals 8-12. This report will only have data when the nomogram is binding, thus will be intermittent.

    2. PRC_MPM_CNSTR_CMP - RTD - this report has data TD 3/22 starting HE12

    3. PRC_MPM_RTM_REF_BUS - RTD - this report has data TD 3/22 starting HE12

PIRP System Decommissioning Simulation

PIRP System Decommissioning Market Simulation timeline –

- PIRP System Decommissioning Simulation – April 4, 2017 – April 18, 2017

CMRI Tech Spec –

- http://www.caiso.com/Documents/CMRI-InterfaceSpecification_v3_5_4Clean_Fall2016Release.pdf

MRI-S ACL Groups and CPG Enhancements Simulation

MRI-S ACL Groups and CPG Enhancements Market Simulation timeline –

- MRI-S ACL Groups and CPG Enhancements Simulation - March 13, 2017 – May 26, 2017 Unstructured

MRI-S Tech Spec –

- http://www.caiso.com/Documents/OMAROnlineReplacementTechnicalSpecificationCleanV1_10.pdf

AIM ACL Training –

- http://www.caiso.com/Documents/Access_IdentityManagementAccessControlListTraining-Jan_2017.pdf

AIM User Guide –

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

California ISO

Known Issues

#	System	Summary	Status	Estimated Fix Date
1	MRI-S	Implementation of the requirement stated in MRIS-BRQ085 for allowing users within the same organization to view the batch submission status is being delayed in market simulation pending further security validations.	Open	This will be implemented prior to the close of market simulation, date TBD.
2	MRI-S	The error description for error code 1028 incorrectly has X and Y instead of the actual meter value and PMAX, respectively.	Open	This will be implemented prior to the close of market simulation, date TBD.
3	MRI-S	Intermittent issues with Export function in the UI not returning expected results.	Open	This will be fixed prior to the close of market simulation. For now, the ISO is planning on opening the UI without the export function to allow further testing on other functionality.
4	MRI-S	UpdateSinceDateTime does not allow time input	Open	This will be fixed prior to the close of market simulation, date TBD.
5	MRI-S	IntervalEndTime for 3/12/2017 (DST Date) is not displaying correctly	Open	This will be fixed prior to the close of market simulation, date TBD.

California ISO

Transmission B2B Service Changes

- Production activation, April 5, 2017
- Transmission B2B Service Changes
  - V1 supported, V2 to be added
  - NoW Enumerations: RIMS_OUTAGE, RIMS_TESTING,
  - New Equipment Type – SYNCHRONOUS_MACHINE and Multiple instances of Adjusted Operational Limit per Equipment

Nature of Work	Switch Modeling	EquipmentDerate	Overlaps Allowed	Exclusive Nature of Work
RIMS Outage	A	A	Yes	Yes
RIMS Testing	A	A	Yes	Yes
Out of service	R	A	Yes	Yes
Energized Work			Yes	Yes
Relay work		A	Yes	Yes
Special Setup	A	A	Yes	Yes
Test Program	A	A	Yes	Yes
Equipment Derate		R	Yes	Yes
Equipment Abnormal	A	A	Yes	Yes
Path Limitation	A	A	Yes	Yes
Communications			Yes	Yes
Out of Service with Special Setup	A	A	Yes	Yes

Next Steps

- The next teleconference will take place @ 14:00 PPT on Thursday April 6, 2017

Reference Slides

Settlements Calendar for Settlements Production Release (sample statement)

Calendar Day	CMRI T+1B	Publish Initial Statement T+4B
04-Mar-17		
05-Mar-17		
06-Mar-17		
07-Mar-17		
08-Mar-17		
09-Mar-17	8-Mar	
10-Mar-17		
11-Mar-17		
12-Mar-17		
13-Mar-17		
14-Mar-17		8-Mar
15-Mar-17		
16-Mar-17		
17-Mar-17		

Draft Configuration Output File has been posted under "**Settlements technical documentation**" at:

http://www.caiso.com/market/Pages/Settlements/Default.aspx

Settlements Calendar for Spring Release 2017

Calendar Day	CMRI T+1B	Publish Initial Statement T+4B
13-Feb-17		
14-Feb-17		
15-Feb-17		
16-Feb-17	15-Feb	
17-Feb-17		
18-Feb-17		
19-Feb-17		
20-Feb-17	ISO Holiday	
21-Feb-17		
22-Feb-17		15-Feb
23-Feb-17		
24-Feb-17		
25-Feb-17		
26-Feb-17		

February 15, 2017 TD statement was published on time.

California ISO

FMM and RTD Market Execution Reports

Link -
http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=DB357A9C-87C9-4BDF-8020-29C5E40A7A82

Mitigation Status

MPM Not Competitive constraints on Oasis

Not competitive constraints for 02/15/2017 HE13

HE	Interval	Not competitive Interface	Type of constraint
13	1	7755 SOL5_NG	Nomogram
13	1	PATH26_BG TCOR	
13	1	PACW	EIM XFER
13	1	PSEI	EIM XFER
13	2	25406_J.HINDS _230_24806_MIRAGE _230_BR_1 _1	LINE
13	2	NEVP	EIM XFER
13	2	AZPS	EIM XFER
13	2	PSEI	EIM XFER
13	2	PACE	EIM XFER
13	2	PACW	EIM XFER
13	3	25406_J.HINDS _230_24806_MIRAGE _230_BR_1 _1	LINE
13	3	PATH26_BG TCOR	
13	3	SUMMIT_BG	TCOR
13	3	NEVP	EIM XFER
13	3	PSEI	EIM XFER
13	3	PACE	EIM XFER
13	3	PACW	EIM XFER
13	4	25406_J.HINDS _230_24806_MIRAGE _230_BR_1 _1	LINE
13	4	SUMMIT_BG	TCOR
13	4	NEVP	EIM XFER
13	4	AZPS	EIM XFER
13	4	PSEI	EIM XFER
13	4	PACE	EIM XFER
13	4	PACW	EIM XFER
13	4	7755 SOL5_NG	Nomogram

California ISO

Not competitive constraints for 02/15/2017 HE13

13	5	25406_J.HINDS _230_24806_MIRAGE _230_BR_1 _1	LINE
13	5	NEVP	EIM XFER
13	5	AZPS	EIM XFER
13	5	PSEI	EIM XFER
13	5	PACE	EIM XFER
13	5	PACW	EIM XFER
13	6	25406_J.HINDS _230_24806_MIRAGE _230_BR_1 _1	LINE
13	6	NEVP	EIM XFER
13	6	AZPS	EIM XFER
13	6	PSEI	EIM XFER
13	6	PACE	EIM XFER
13	6	PACW	EIM XFER
13	7	25406_J.HINDS _230_24806_MIRAGE _230_BR_1 _1	LINE
13	7	NEVP	EIM XFER
13	7	AZPS	EIM XFER
13	7	PSEI	EIM XFER
13	7	PACE	EIM XFER
13	7	PACW	EIM XFER
13	12	NEVP	EIM XFER
13	12	AZPS	EIM XFER
13	12	PSEI	EIM XFER
13	12	PACE	EIM XFER
13	12	PACW	EIM XFER

California ISO

Key points

- Input bid from corresponding RTPD is used in RTD LMPM. It can be market bid, or mitigated in RTPD bid.

- RTPD mitigated bid can be mitigated farther in RTD.

- RTD LMPM evaluates second interval. If bids are mitigated, they will be used for binding interval of next RTD.

- Mitigated bids will be used within quarter of the hour (15 min interval corresponding to RTPD interval). Corresponding RTPD input bids used at the beginning of every quarter.

- EIM bids will be mitigated if EIM MCP is higher than CAISO MCP.

California ISO

ISO System Access Documentation

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

ISO Market Simulation Support

- **Hours -** 09:00 - 18:00, PPT (Monday through Friday)
- **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 ISO CIDI case management system
- CIDI tickets will need to have
  - 'Functional Environment' = "Market Simulation Spring 2017"
  - Or 'Functional Environment' = "Independent Market Simulation 2017"

  to be reviewed by ISO SME's