



California ISO

---


## **Market Simulation Structured Scenarios**

---

# **Reliability Must-Run and Capacity Procurement Mechanism Enhancements (RMR-CPM)**

1.2

September 11, 2019


 <b>California ISO</b> <small>Shaping a Renewed Future</small>	<b>Market Simulation Templates</b> Program Office	Template Version:	1.1
		Template Date:	03/30/2011
<b>ISO External Market Simulation Structured Scenarios</b>		Document Version:	1.2
		Effective Date	9/11/2019

## Location of Document

[Link](#)


## Revision History

Date	Version	Description	Author
05/05/19	Draft	Initial Draft	Christopher McIntosh
05/13/19	Draft	Scenario Details Updated	Christopher McIntosh, Wendell Tamblyn and Alex Kandybenko
5/13/19	Draft	Scenario Details Updated	Christopher McIntosh and Akm Ferdous
6/13/19	Draft	Settlements Impacted CCs Updated with review by Melchor Ciubal	Tyler DuBeshter
6/25/19	1.0	ED Scenario Added	Christopher McIntosh
8/15/19	1.1	Deadline for registration 8/30/19 identified	Christopher McIntosh
9/11/19	1.2	Scenario #1 for Expected Outcome corrected.	Christopher McIntosh

	<b>Market Simulation Templates</b> Program Office	Template Version:	1.1
		Template Date:	03/30/2011
<b>ISO External Market Simulation Structured Scenarios</b>		Document Version:	1.2
		Effective Date	9/11/2019

# Table of Contents

<b>1. INTRODUCTION.....</b>	<b>4</b>
<b>2. STRUCTURED SCENARIOS APPROACH .....</b>	<b>4</b>
2.1 HIGH LEVEL OVERVIEW .....	4
2.2 STRUCTURED SCENARIOS CONDITIONS AND SETUP .....	4
2.3 STRUCTURED SCENARIO .....	5
<b>3. ISO MARKET SIMULATION CONTACT.....</b>	<b>11</b>

 <b>California ISO</b> <small>Shaping a Renewed Future</small>	<b>Market Simulation Templates</b> Program Office	Template Version:	1.1
		Template Date:	03/30/2011
<b>ISO External Market Simulation Structured Scenarios</b>		Document Version:	1.2
		Effective Date	9/11/2019

# 1. Introduction

The objective of this document is to provide the information needed to ISO Market Participants to participate in the Reliability Must-Run and Capacity Procurement Mechanism Enhancements (RMR- CPM) simulation scenarios. For the scope of this implementation and this initiative, please refer to the Reliability Services - External Business Requirements Specification – ([link](#))

## 2. Structured Scenarios Approach

### 2.1 High Level Overview

This identified scenarios will be executed during the structured scenario portion of the RMR-CPM market simulation.


### 2.2 Structured Scenarios Conditions and Setup

The following additional setup will be used by the ISO during the scenario execution.

MP's will need to register their request with the ISO to participate in this simulation via the [MarketSim@caiso.com](mailto:MarketSim@caiso.com) mailbox.

Please submit the information requested below by August 30<sup>th</sup>, 2019.


1. Please identify up to two resources to validate the new Tariff RMR type resources.
  - a. One new tariff RMR regular resource and one new tariff RMR use limited resource if requested, ISO will designate these resources as RMR in CIRA.
  - b. RA and Supply Plans should be submitted for September 2019 and October 2019 months. ISO will change the plans cutoff to accommodate the RA and Supply plans. All plans are due by 9/13 Fall 2019 Simulation.
  - c. POSO analysis will be effective starting from 9/16 for September RA month and hence Planned outages on RMR & Non-RMR resources need to be submitted in web OMS before this date.
  - d. MPs are required to submit planned and forced RMR outages, these will be auto approved in OMS.
  - e. MPs should bid in the registered resources they see fit for the scenario for RAAIM
  - f. ISO will run suitable modules and designate RMR for the substitution scenario.

 <b>California ISO</b> <small>Shaping a Renewed Future</small>	<b>Market Simulation Templates</b> Program Office	Template Version:	1.1
		Template Date:	03/30/2011
<b>ISO External Market Simulation Structured Scenarios</b>		Document Version:	1.2
		Effective Date	9/11/2019

## 2.3 Structured Scenario


Scenario Number		
<b>1</b>	Description	DAM Dispatch of New Tariff RMR Resources
	ISO Actions	ISO will adjust market conditions to make sure registered RMR resources are dispatched in DAM, similar as any other market resource.
	EIM Market Participant Actions	N/A
	ISO Market Participant Actions	MP's can submit bids on these resource if desired, if not SIBR will create bids for MOO qualified new tariff RMR resources.
	Expected Outcome	Validate new tariff RMR resource dispatches are not viewable in the DA RMR Dispatches report in CMRI. New tariff RMR resources are viewable in Day Ahead Generation Commodity Prices and Day Ahead Generation Market Results in CMRI.
	Anticipated Settlement Outcome	CC7020, CC7026

Settlements
Scenario 1 is the settlement of DAM and other market results based on RMR bids of participating resources.

 <b>California ISO</b> <small>Shaping a Renewed Future</small>	<b>Market Simulation Templates</b> Program Office	Template Version:	1.1
		Template Date:	03/30/2011
<b>ISO External Market Simulation Structured Scenarios</b>		Document Version:	1.2
		Effective Date	9/11/2019


Scenario Number		
<b>2</b>	Description	RTM Dispatch of New Tariff RMR Resources
	ISO Actions	ISO will adjust market conditions to make sure registered RMR resources are dispatched in RTM, similar as any other market resource.
	EIM Market Participant Actions	N/A
	ISO Market Participant Actions	MP's can submit bids on these resource if desired, if not SIBR will create bids for MOO qualified new tariff RMR resources.
	Expected Outcome	Validate dispatches RMR in ADS and FMM/RTD Schedules and Prices reports in CMRI.
	Anticipated Settlement Outcome	CC7020, CC7026

Settlements	
	Scenario 2 is the settlement of RTM and other market results based on RMR bids of participating resources.

 <b>California ISO</b> <small>Shaping a Renewed Future</small>	<b>Market Simulation Templates</b> Program Office	Template Version:	1.1
		Template Date:	03/30/2011
<b>ISO External Market Simulation Structured Scenarios</b>		Document Version:	1.2
		Effective Date	9/11/2019

Scenario Number		
<b>3</b>	Description	New Tariff RMR Resource Substitution - Suppliers to validate planned outage substitution obligation use limited or regular.
	ISO Actions	SO runs OIA and POSO, ISO to verify CSRM output, Operational RA, OMS auto approves outages.
	EIM Market Participant Actions	N/A
	ISO Market Participant Actions	Supplier should create planned outages with and without SNOO and OPOO. Supplier to view OIA output. <ul style="list-style-type: none"> <li>a. MW impact</li> <li>b. Operational RA</li> </ul> Supplier to view initial planned outage substitution obligation for RA (initial POSO). Check download to excel functionality which exports all outages considered for analysis. Validate RAAIM. Validate RA report.
	Expected Outcome	Outages are visible in CIRA and planned outage substitutions obligation are as expected (POSO screen).
	Anticipated Settlement Outcome	CC8830 (mini-monthly settlement needed)


Settlements	
	Scenario 3 is the settlement of DAM, RTM, outages, and other market results based on RMR participating resources.

 <b>California ISO</b> <small>Shaping a Renewed Future</small>	<b>Market Simulation Templates</b> Program Office	Template Version:	1.1
		Template Date:	03/30/2011
<b>ISO External Market Simulation Structured Scenarios</b>		Document Version:	1.2
		Effective Date	9/11/2019

Scenario Number		
<b>4</b>	Description	New Tariff RMR Resource Substitution - Suppliers to validate planned outage substitution obligation for new outages use limited or regular.
	ISO Actions	ISO runs OIA and POSO, ISO to verify CSRM output, OMS auto approves outages.
	EIM Market Participant Actions	N/A
	ISO Market Participant Actions	Supplier submits new outages. Supplier changes outages submitted before T-25. Supplier to view latest POSO runs and changes in POSO. Validate RAAIM. Validate RA report.
	Expected Outcome	Outages are visible in CIRA and planned outage substitutions obligation are as expected.
	Anticipated Settlement Outcome	CC8830 (mini-monthly settlement needed)
<b>Settlements</b>		
Scenario 4 is the settlement of DAM, RTM, outages, and other market results based on RMR participating resources.		

Scenario Number		
<b>5</b>	Description	New Tariff RMR Resource Substitution - Supplier creates planned outage substitution for use limited or regular.
	ISO Actions	OMS auto approves outages.
	EIM Market Participant Actions	N/A
	ISO Market Participant Actions	Supplier submits planned outage substitution for RA & CPM resources. Validate RAAIM. Validate RA report for outage resource and substitute resource. Validate reduction in POSO assignment.
	Expected Outcome	Outages are visible in CIRA.
	Anticipated Settlement Outcome	CC8830 (mini-monthly settlement needed)




 <b>California ISO</b> <small>Shaping a Renewed Future</small>	<b>Market Simulation Templates</b> Program Office	Template Version:	1.1
		Template Date:	03/30/2011
<b>ISO External Market Simulation Structured Scenarios</b>		Document Version:	1.2
		Effective Date	9/11/2019

	<b>Settlements</b>
	Scenario 5 is the settlement of DAM, RTM, outages, and other market results based on RMR participating resources.


Scenario Number		
<b>6</b>	Description	New Tariff RMR Resource Substitution - Supplier submits forced outage substitution
	ISO Actions	OMS auto approves outages.
	EIM Market Participant Actions	N/A
	ISO Market Participant Actions	Supplier submits forced outage substitution or RA & CPM resources. Validate local and system split. For RA & CPM resources. Validate RAAIM. Validate RA report.
	Expected Outcome	Outages are visible in CIRA.
	Anticipated Settlement Outcome	CC8830 (mini-monthly settlement needed)

	<b>Settlements</b>
	Scenario 6 is the settlement of DAM, RTM, outages, and other market results based on RMR participating resources.

 <b>California ISO</b> <small>Shaping a Renewed Future</small>	<b>Market Simulation Templates</b> Program Office	Template Version:	1.1
		Template Date:	03/30/2011
<b>ISO External Market Simulation Structured Scenarios</b>		Document Version:	1.2
		Effective Date	9/11/2019

Scenario Number		
<b>7</b>	Description	Manual Dispatch for new tariff RMR resources
	ISO Actions	ISO will manually dispatch registered new-tariff RMR resources through exceptional dispatch instructions, applying non-RMR instruction types.
	EIM Market Participant Actions	N/A
	ISO Market Participant Actions	MP's can submit bids on these resource if desired, if not SIBR will create bids for MOO qualified new tariff RMR resources.
	Expected Outcome	Validate RT Market follows manual dispatches and instructions are in ADS.
	Anticipated Settlement Outcome	CC 1001, 3303, 6460, 6470, 6482, 6488

Settlements	
	Scenario 7 is the settlement of RTM with exceptional dispatch and other market results based on RMR bids of participating resources.

 <b>California ISO</b> <small>Shaping a Renewed Future</small>	<b>Market Simulation Templates</b> Program Office	Template Version:	1.1
		Template Date:	03/30/2011
<b>ISO External Market Simulation Structured Scenarios</b>		Document Version:	1.2
		Effective Date	9/11/2019

### 3. ISO Market Simulation Contact

Please contact [MarketSim@caiso.com](mailto:MarketSim@caiso.com) if you have any questions or concerns regarding these scenarios.