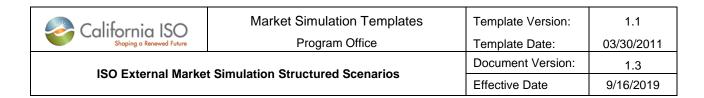


## **Market Simulation Structured Scenarios**

# **Energy Storage and Distributed Energy Resources (ESDER) Phase 3A**

1.3

**September 16, 2019** 



#### **Location of Document**

<u>Link</u>

## **Revision History**

Date	Version	Description	Author
05/05/19	Draft	Initial Draft	Christopher McIntosh
05/15/19	Draft	Scenario Details Updated	Juan Alvarez Lopez, Greg Ford and Christopher McIntosh
05/28/19	Draft	Settlements Charge Codes Identified, Reviewed with Melchor Ciubal  Tyler DuBesht	
05/28/19	1.0	Ready for Publication Christopher McI	
06/18/19	1.1	Project Team Updates, Scenario #3 60 Min BCR removed.	Christopher McIntosh
08/15/19	1.2	Deadline for registration 8/30/19 identified	Christopher McIntosh
9/16/19	1.3	Scenarios Execution Trade Date Identified	Christopher McIntosh



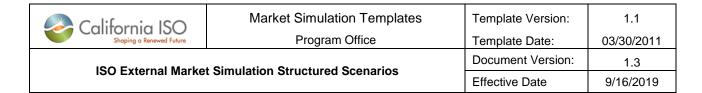
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Template Version: 1.1
Template Date: 03/30/2011
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#### **ISO External Market Simulation Structured Scenarios**

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#### 1. Introduction

The objective of this document is to provide the information needed to ISO Market Participants to participate in the Energy Storage and Distributed Energy Resources (ESDER) Phase 3 simulation scenarios. For the scope of this implementation and this initiative, please refer to the ESDER 3 - External Business Requirements Specification  $-(\underline{link})$ 

## 2. Structured Scenarios Approach

#### 2.1 High Level Overview

This identified scenarios will be executed during the structured scenario portion of the ESDER 3 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 <a href="MarketSim@caiso.com">MarketSim@caiso.com</a> mailbox.

Please submit the information requested below by August 30th, 2019.

1. MP's will need to register specific resources with the ISO identifying which resources they would like setup as 60 minute dispatchable PDR and 15 minute dispatchable PDR. ISO will allow one of each PDR resource type for scenario executions.

California ISO	Market Simulation Templates	Template Version:	1.1
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ICO External Marks	Document Version:	1.3	
ISO External Marke	Effective Date	9/16/2019	

### 2.3 Structured Scenario

Scenario Number	Scenario Execution Trade Date: 9/18/19			
	Description	DAM Dispatch of 60 Min, 15 Min and 5 Min PDR Type Resource		
	ISO Actions	ISO to make sure the registered 60 Min, 15 Min and 5 Min resources are dispatched in DAM as per existing functionality (hourly basis). ISO may adjust market conditions to ensure commitment in DAM.		
	EIM Market Participant Actions	N/A		
1	ISO Market Participant Actions	ISO recommends low price bids on these PDR resources.		
	Expected Outcome	PDR resources are dispatched in the DAM and can be verified in the DAM Unit Commitments, DAM Generation Market Results and DAM Generation Commodity Prices Reports in CMRI.		
	Anticipated Settlement Outcome	CC6011, CC6460, CC6470, CC6475		

Settlements	
Scenario 1 is the settlement of DAM, FMM, RTM, and based on new dispatch options for PDR participating res	

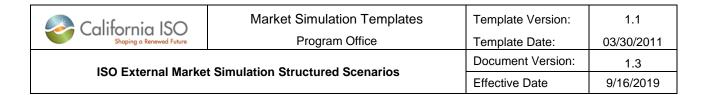


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ISO External	Market	Simulation	Structured	<b>Scenarios</b>

Scenario Number	Scenario Execution Trade Date: 9/18/19			
	Description	RTM Dispatch of 60 Min PDR Type and 15 Min PDR Type Resource		
	ISO Actions	Monitor system stability to make sure good quality prices thus allowing the dispatch of 60 Min and 15 Min PDR resources. ISO may adjust market conditions to ensure commitment in RTM.		
	EIM Market Participant Actions	N/A		
2	ISO Market Participant Actions	ISO recommends low price bids on these PDR resources.		
	Expected Outcome	60 Min and 15 Min PDR resources are dispatched in their respective time frames and can be verified in the RTUC Advisory Schedules (for the HASP hour), FMM Schedules and Prices reports in CMRI. Verify the 5 Min dispatch is ADS is the same as the 60 min or 15 min dispatch.		
	Anticipated Settlement	CC6011, CC6460, CC6470, CC6475		
	Outcome			

Settlements
Scenario 2 is the settlement of DAM, FMM, RTM, and other market results
based on new dispatch options for PDR participating resources.



Scenario Number	Scenario Execution Trade Date: 9/18/19			
	Description	15 Min PDR Type Resource Bid Cost Recovery		
	ISO Actions	ISO to manually change prices after the fact for the registered 15 Min PDR resources for a specific Trade Date.		
	EIM Market Participant Actions	N/A		
3	ISO Market Participant Actions	ISO recommends low price bids on these PDR resources.		
	Expected Outcome	15 Min PDR resources prices are changed after the fact and 15 Min PDR Receive BCR. FMM Prices, EE and EEAD reports in CMRI to be verified.		
	Anticipated Settlement	CC6620, CC6011, CC6460, CC6470, CC6475		
	Outcome			

Settlements
Scenario 3 is the settlement of DAM, FMM, Bid cost recovery, and other market results based on new dispatch options for PDR participating resources.

## 3. ISO Market Simulation Contact

Please contact <u>MarketSim@caiso.com</u> if you have any questions or concerns regarding these scenarios.