



California ISO

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## **Market Simulation Structured Scenarios**

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# **Energy Storage and Distributed Energy Resources Phase 2**

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Revision History

Date	Version	Description	Author
6/28/18	1.0	Initial	Trang Deluca, Adam Wohlsen
7/30/18	1.1	Updated ISO Market Participant Actions section for Scenario #9 Validate New Ancillary Service Measurement Types	Adam Wohlsen
8/13/18	1.2	EIM Market Participant Actions section for Structured Scenarios 2-6 now has the additional verbiage: "For EIM entities who are currently modeled as a PDR/RDDRR"	Adam Wohlsen
8/17/18	1.3	Clarification provided for ISO Market Participant Actions section of Structured Scenario #7	Adam Wohlsen
8/23/18	1.4	Structured Scenarios #2-6 updated	Adam Wohlsen
9/17/18	1.5	Trade Dates and modifications to ISO Market Participant Actions added for Structured Scenarios #7,8, and 9.	Adam Wohlsen

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# 1. Introduction

The objective of this document is to provide the information needed for Market Participants to participate in the market simulation structured scenarios.

## 2. Structured Scenario Approach

### 2.1 High Level Overview

These identified scenarios will be executed during the structured scenario portion of the Energy Storage and Distributed Energy Resources Phase 2 implementation market simulation.

### 2.2 Structured Scenarios Conditions and Setup

TBD

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## 2.3 Structured Scenarios

Scenario Number	ESDER Phase 2 – TD TBD	
<b>1</b>	Description	Net Benefits Test Report
	ISO Actions	Expand fuel regions to add all active gas hubs to Net Benefits Test Report published on Caiso.com
	EIM Market Participant Actions	Review Net Benefits Test report
	ISO Market Participant Actions	Review Net Benefits Test report
	Expected Outcome	New Net Benefits Test report is published. Net Benefits Test report includes all active gas hubs
	Anticipated Settlement Outcome	N/A

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Scenario Number	ESDER Phase 2 – TD TBD	
<b>2</b>	Description	Demand Response Registration System Approval of Registrations
	ISO Actions	Inputs the approved Performance Evaluation Methodology (or baseline) into DRRS
	EIM Market Participant Actions	For EIM entities who are currently modeled as a PDR/RDDRR, check DRRS for your approved Performance Evaluation Methodology (or baseline) to be available in the picklist, and create your locations. Locations will be in pending status for 1 business day.
	ISO Market Participant Actions	Check DRRS for your approved Performance Evaluation Methodology (or baseline) to be available in the picklist, and create your locations. Locations will be in pending status for 1 business day
	Expected Outcome	1 business day after creating your locations, you can begin your registration.
	Anticipated Settlement Outcome	N/A

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Scenario Number	ESDER Phase 2 – TD TBD	
<b>3</b>	Description	Demand Response Registration System - Control Group Baseline
	ISO Actions	N/A
	EIM Market Participant Actions	For EIM entities who are currently modeled as a PDR/RDDRR, create registration for the Control Group Performance Evaluation Methodology (or baseline) containing:  * Use 150 or more locations for the Control Group, and * No Treatment Group
	ISO Market Participant Actions	Create registration containing:  * Use 150 or more locations for the Control Group, and * No Treatment Group
	Expected Outcome	Registration fails <i>(A minimum of 150 locations for the control group and at least 1 Treatment Group is required)</i>
	Anticipated Settlement Outcome	N/A

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Scenario Number	ESDER Phase 2 – TD TBD	
<b>4</b>	Description	Demand Response Registration System - Control Group Baseline
	ISO Actions	N/A
	EIM Market Participant Actions	For EIM entities who are currently modeled as a PDR/RDDRR, create registration containing: <ul style="list-style-type: none"> <li>* Use 150 or more locations for the Control Group, and</li> <li>* At least 1 Treatment Group (if multiple, can only be assigned to 1 sub-LAP)</li> </ul> <i>(note that Control Group locations can be from multiple sub-LAPs, but the treatment group can only be from 1 sub-LAP)</i>
	ISO Market Participant Actions	Create registration containing: <ul style="list-style-type: none"> <li>* Use 150 or more locations for the Control Group, and</li> <li>* At least 1 Treatment Group (if multiple, can only be assigned to 1 sub-LAP)</li> </ul> <i>(note that Control Group locations can be from multiple sub-LAPs, but the treatment group can only be from 1 sub-LAP)</i>
	Expected Outcome	Registration is successful  <i>(requirement of at least 150 locations designated as Control Group and at least 1 Treatment Group has been met)</i>
	Anticipated Settlement Outcome	N/A

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Scenario Number	ESDER Phase 2 – TD TBD	
<b>5</b>	Description	Demand Response Registration System - Control Group Baseline
	ISO Actions	N/A
	EIM Market Participant Actions	<p>For EIM entities who are currently modeled as a PDR/RDDRR, create registration containing:</p> <ul style="list-style-type: none"> <li>* A minimum of 150 locations for the Control Group, and</li> <li>* At least 2 Treatment Groups, being from different sub-LAPs</li> </ul> <p><i>(note that Control Group locations can be from multiple sub-LAPs, but the treatment group can only be from 1 sub-LAP)</i></p>
	ISO Market Participant Actions	<p>Create registration containing:</p> <ul style="list-style-type: none"> <li>* Less than 150 locations for the Control Group, and</li> <li>* At least 1 Treatment Group (if multiple, can only be assigned to 1 sub-LAP)</li> </ul> <p><i>(note that Control Group locations can be from multiple sub-LAPs, but the treatment group can only be from 1 sub-LAP)</i></p>
	Expected Outcome	<p>Registration fails</p> <p><i>(The Treatment Group can only be from 1 sub-LAP)</i></p>
	Anticipated Settlement Outcome	N/A

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Scenario Number	ESDER Phase 2 – TD TBD	
<b>6</b>	Description	Demand Response Registration System - Control Group Baseline
	ISO Actions	N/A
	EIM Market Participant Actions	<p>For EIM entities who are currently modeled as a PDR/RDDRR, create registration using the approved baseline</p> <p>* Use 150 or more locations for the Control Group, and * Treatment Group will only have multiple Sub-LAP assigned , 1 or 2 not matched with the registration</p>
	ISO Market Participant Actions	<p>Create a registration Containing:</p> <p>* Use 150 or more locations for the Control Group, and * Treatment Group will only have multiple Sub-LAP assigned , 1 or 2 not matched with the registration</p>
	Expected Outcome	<p>Registration fails <i>(The Treatment Groups must all be within the same sub-LAP)</i></p>
	Anticipated Settlement Outcome	N/A

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Scenario Number	ESDER Phase 2 – TD 9/19/2018	
<b>7</b>	Description	Validate Measurement Types for All Baselines Except Control Group
	ISO Actions	ISO will dispatch registered resources for this scenario on the scheduled Trade Date
	EIM Market Participant Actions	Work with their client rep, to determine eligibility
	ISO Market Participant Actions	Register resources and submit Demand Response Energy Measurement (DREM) as GEN, and submit CBL (underlying load data) for TD 9/19 by 9/25 18:00 PT
	Expected Outcome	ISO will show resources settle according to the new measurement types
	Anticipated Settlement Outcome	CC 6470, 6475, 6800, 6824, 6620, 6630 CC 7070, 7071, 7081

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Scenario Number	ESDER Phase 2 – TD 9/19/2018	
<b>8</b>	Description	Validate Measurement Types for Control Group Baseline
	ISO Actions	ISO will dispatch registered resources for this scenario on the scheduled Trade Date
	EIM Market Participant Actions	Work with their client rep, to determine eligibility
	ISO Market Participant Actions	Submit performance data for all measurement types (GEN, CBL, TMNT) for TD 9/19 by 9/25 18:00 PT
	Expected Outcome	ISO will show resources settled for GEN measurement type
	Anticipated Settlement Outcome	CC 6470, 6475, 6800, 6824, 6620, 6630 CC 7070, 7071, 7081

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Scenario Number	ESDER Phase 2 – TD 9/19/2018	
<b>9</b>	Description	Validate new Ancillary Service Measurement Types: GEN, MBMA, CBL
	ISO Actions	ISO will dispatch registered resources for this scenario on the scheduled Trade Date
	EIM Market Participant Actions	Work with their client rep, to determine eligibility
	ISO Market Participant Actions	Setup AS resources in Masterfile, and associate the different measurement types. Submit DREM as GEN, submit MBMA for AS, and submit CBL (underlying load data) for TD 9/19 by 9/25 18:00 PT
	Expected Outcome	Settlements shall map the submitted Measurements types to appropriated Bill Determinants
	Anticipated Settlement Outcome	N/A

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## ISO Market Simulation Contact

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