Market Simulation Structured Scenarios

Commitment Cost Enhancements Phase 3 Implementation

Version: 1.5

September 6, 2018

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Revision History

Date	Version	Description	Author
7/18/18	1.0	Initial	Trang Deluca, Adam Wohlsen
7/30/18	1.1	Updated ISO Actions as well as EIM and ISO Market Participant Actions for Opportunity Cost Adders to CMRI and SIBR Scenario #1. Previous ULR Scenarios combined into Annual and Other ULR Scenario #2 and Test ULR nature of work for different resources, Use Limit Types, and granularities Scenario #3. These Scenarios have updated ISO Actions, EIM and ISO Market Participant Actions, as well as updated Expected Outcomes.	Adam Wohlsen
8/6/18	1.2	Anticipated Settlement Outcome in Scenario #1 changed to N/A. Scenario #2 now encompasses all use limited nature of works	Adam Wohlsen
8/15/18	1.3	The ISO Actions, EIM/ISO Market Participant Actions, and Anticipated Settlement Outcome for Structured Scenario #1 have been clarified. ISO Actions for Structured Scenario #2 have been updated as well as the Anticipated Settlement Outcome.	Adam Wohlsen
8/30/18	1.4	Significant amount of detail added to Structured Scenario #1. Updated Expected Outcome in Structured Scenario #2.	Adam Wohlsen

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Date	Version	Description	Author
9/6/18	1.5	Scenario #2 ISO Actions and ISO Market Participant Actions have been updated.	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 Commitment Cost Enhancements Phase 3 implementation market simulation.

ISO will manually flag resources, excluding variable energy resources, as a use limited resource in the Master File Resource Data Template in MapStage to support SC ability to test functionality on any resource. Additional data will need to be submitted by the SC to support the structured scenarios.

2.2 Structured Scenarios Conditions and Setup

TBD

2.3 Structured Scenarios

Scenario Number	Commitment Cost Enhancements Phase 3 – TD TBD	
1	Description	Opportunity Cost Adders to Customer Market Results Interface (CMRI) and Scheduling Infrastructure and Business Rules (SIBR). Functional testing of the data flow of the new opportunity cost adders, SIBR bid validation rules with new bid cap formulation, and publishing CMRI reports relative to new functionality. The opportunity cost adders will be calculated based on production grade historical data. See BRS page 51 for OCC-BRQ 5255 which shows calculation. CMRI reports are available at CMRI > Default Bids >Default Energy Bid Curves & Default Commitment Costs & Actual Limitation Values & Resources Opportunity Costs.
	ISO Actions	Starting on September 17th, run Opportunity Cost Calculator for the valid, submitted set of resources. By September 25, publish limitation usage values to the Actual Limitation Values report in Map stage CMRI. By September 25, publish opportunity cost adders to Resource Opportunity Costs report in Map Stage CMRI for the month of October. For each trade date of effective month in market simulation window (October 2018), calculate default energy bid under variable cost option which includes opportunity cost adder for ULPDT submissions with use limit type of energy. Publish default energy bid curves report and Resource Opportunity Cost report in Map Stage. For each trade date of effective month in market simulation window (October 2018), SIBR will incorporate commitment cost opportunity cost adder for commitment cost bid validation.
	EIM Market Participant Actions	Prior to September 5, submit ULPDT records for up to 5 resources per Scheduling Coordinator via Master File UI in Map Stage. Modify implied start in Generator Resource Data Template (GRDT) Map Stage to test the Opportunity Cost Calculation for the specific type of MSG limitation (Section 4 of Use Limited Resource Guidebook). Starting on September 30th, for each day beginning effective trade date October 1 – October 5, submit bids in SIBR day-ahead and real-time market bidding windows to test that the commitment cost bids are being validated

	against a maximum allowable value that includes the applicable opportunity cost adders [OCC-BRQ5632]. $\text{Maximum Allowable SUC/TC/MLC} = (125\% * \text{Proxy}_{existing}) + \text{OC}_{SUC/TC/MLC}$ Market participants can submit bids as follows to test: • Bid resource or MSG with commitment cost between the values shown in the default commitment costs CMRI report and the expected value for maximum allowable commitment cost to test appropriate validation of bids. • Bid resource or MSG with commitment cost above the maximum allowable value. The system will cap the commitment cost bid to the maximum allowable value.	
	ISO Market Participant Actions	Prior to September 5, submit ULPDT records for up to 5 resources per Scheduling Coordinator via Master File UI in Map Stage. Modify implied start in Generator Resource Data Template (GRDT) Map Stage to test the Opportunity Cost Calculation for the specific type of MSG limitation (Section 4 of Use Limited Resource Guidebook). Starting on September 30th, for each day beginning effective trade date October 1 – October 5, submit bids in SIBR day-ahead and real-time market bidding windows to test that the commitment cost bids are being validated against a maximum allowable value that includes the applicable opportunity cost adders [OCC-BRQ5632]. $\text{Maximum Allowable SUC/TC/MLC} = (125\% * \text{Proxy}_{existing}) + \text{OC}_{SUC/TC/MLC}$ Market participants can submit bids as follows to test: • Bid resource or MSG with commitment cost between the values shown in the default commitment costs CMRI report and the expected value for maximum allowable commitment cost to test appropriate validation of bids. • Bid resource or MSG with commitment cost above the maximum allowable value for commitment cost. The system will cap the commitment cost bid to the maximum allowable value.
	Expected Outcome	Starting September 25th, validate the following CMRI reports for the month of October: CMRI - Actual Limitation Values report is available by resource. Resource Opportunity Costs report is available.

		Starting September 30th for trade date October 1st: Default Energy Bid Curves (DEB) report reflects opportunity cost addition • Market participant-submitted minimum load cost, start-up cost, and transition cost bids validated against bid cap with applicable opportunity cost adders.
	Anticipated Settlement Outcome	Existing Production Functionality (not modified for CCE3) Bid Cost Recovery (BCR) charge code (if committed and revenue shortfall): CC 6620, CC 66200, CC 6630

Scenario Number	Commitment Cost Enhancements Phase 3 – TD TBD	
2	Description	Test Monthly, Annual, Other, Short Term, use limit reached nature of work attributes in Outages. CIRA will calculate exempt MW for RAAIM for the first month. The Short Term use limit reached card is exempt for the period of the outage.
	ISO Actions	All use-limited resources including those identified in Structured Scenario #1 will be used for this scenario. Copy production RA data to market simulation environment.
	EIM Market Participant Actions	N/A
	ISO Market Participant Actions	1) Only submit forced outages. Planned outages will not be processed 2) Submit forced outage with annual use limit nature of work 3) Submit forced outage with other use limit nature of work 4) Ensure no bids are in place to see a RAAIM penalty 5) Include the use limited resources in your showings for September & October & validate final RA monthly showings by 9/15 6) Submit forced timeframe cross-month outages that impacts RA, to span 9/26 through 10/4 for these use-limited resources 7) Check output of the RAAIM Pre-calc DA & RT runs in CIRA to see exempt curtailment MW for the resources with annual & other use limited outages for the impacted trade dates
	Expected Outcome	Validate settlement statement for RAAIM. Incase statements are not available then please verify the exempt MW calculation in CIRA's RAAIM pre-calculation screen.
	Anticipated Settlement Outcome	RAAIM PC Viewable in CC 8830, 8831

3.
ISO Market Simulation Contact

Please contact MarketSim@caiso.com if you have any questions or concerns regarding these structured scenarios.