

Market Simulation Structured Scenarios

Market Settlement Timeline Transformation

Version 1.0

06/05/2020

| California ISO | Market Simulation Templates | Template Version: 2.0 | |
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| Shaping a Renewed Future | Program Office | Template Date: | 05/27/2020 |
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Location of Document

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

Revision History

| Date | Version | Description | Author |
|------------|---------|---|------------------------|
| 06/05/2020 | 1.0 | Initial Posting for Market Participant Review and feedback | Market Simulation Team |

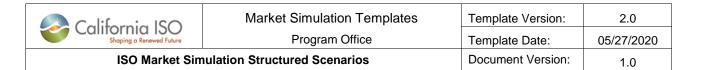


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1. Introduction

The objective of this document is to provide information for ISO Market Participants to participate in the Fall 2020 Structured Market Simulation activities for the Market Settlement Timeline Transformation project. For the scope of this initiative and implementation, please refer to the project Business Requirements Specification (BRS).

Additionally, reference the Market Simulation Plan and Market Simulation Settlements Calendar at CAISO.com under Release Planning, Fall 2020 releases for submission and publication timelines.

All documents are available on CAISO.com under Release Planning, Fall 2020 releases.

2. Market Simulation Structured Scenarios

2.1 High Level Overview

The identified scenarios will be executed during the Fall 2020 market simulation to demonstrate functionality for Market Participant understanding and validation.

2.2 Structured Scenarios Conditions and Setup

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

Market Participant pre-Market Simulation Actions

- 1. MP's will need to register their request with the ISO to participate in the Market Settlement Timeline Transformation project simulation via the MarketSim@caiso.com mailbox.
- 2. Identify at least two (2) existing resources that are certified to submit meter data or updated meter data. The ISO will utilize one of the resources to demonstrate the functionality.

Please submit your request and any additional information identified above by July 3, 2020.

ISO pre-Market Simulation Activities

The ISO will setup the Market Simulation environment and publish a market simulation schedule to support the following scenarios outlined in more detail in section 2.3 below.

Market-related enhancements:



- Scenario #1 Publish Initial Statement and Invoice
- Scenario #2 Publish Recalculation Statement and Invoice
- Scenario #3 Validate Running Simultaneous Settlement Timelines

Statements and meter submission deadlines

Due to the condensed timeline of market simulation, the below table provides general information to participants for the submission of meter data and the posting of settlement statements.

| | | Initial Statement | | Recalculation Statement | |
|----------------------|----------------------|---------------------|----------------------|-------------------------|----------------------|
| | | Meter submission | Publish Statement | Meter submission | Publish Statement |
| Curren | Production | | 3B | | 12B |
| t time line | Market Simulation | N/A | 4B | 4B | 8B |
| MSTT time line | Production | | 9B | | 70B |
| | Market Simulation | 3B | 6B | 6B | 9B |

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2.3 Structured Scenarios

| Scenario Execution Trade Date(s): TBD | | | |
|---------------------------------------|---|--|--|
| Scenario #1 | Publish Initial Statement and Invoice | | |
| Description | On the designated trade date, CAISO shall publish the T+9B initial statement, which will now include the following charge codes: Unaccounted for Energy (UFE) Metered Sub System Load Following (MSSLF) | | |
| | 2) Meter data submission now reflected in T+9B initial statement. | | |
| | 3) Publish initial statement and market invoice. | | |
| Expected System Outcome | Validate against MRI-S meter data and OASIS real-time loss MW. | | |
| Anticipated Settlement Outcome | Charge codes 6474*, 64740*, 1407, and 2407 Real-Time Energy Quantity PC* *These are design only. Configuration Guide change not expected | | |
| | for these charge codes but will be reflected in the daily initial runs that include UFE (CC 6474, 64740), MSS Deviation Penalties (CC 1407, 2407), EIM Transfers, and EIM Bid Cost recovery uplift allocation. | | |
| Details: | Details: | | |
| ISO Actions | Run the market. Expected energy will be published on CMRI. Publish initial statement. Publish market invoice. | | |
| ISO Market Participant Actions | Submit meter data. | | |
| EIM Market Participant Actions | Submit updated meter data if desired. | | |



| Scenario Execution Trade Date(s): TBD | | |
|---------------------------------------|---|--|
| Scenario #2 | Publish Recalculation Statement and Invoice | |
| Description | On the designated trade date, CAISO shall publish the T+70B recalculation statement. System shall consume updated meter data as provided by the participants. System shall zero out any CAISO estimated meter data in which updated information was not provided by the participants. | |
| | 4) Publish recalculation statement and market invoice. | |
| Expected System Outcome | Charge codes: 6474*, 64740*, 1407, 2407 UI charge codes: 6475, 64750 Real-Time Energy Quantity PC* | |
| | *These are design only. Configuration Guide change not expected for these charge codes but will be reflected in the daily initial runs that include UFE (CC 6474, 64740), MSS Deviation Penalties (CC 1407, 2407), EIM Transfers, and EIM Bid Cost recovery uplift allocation | |
| Anticipated Settlement Outcome | Validate any ISO provide estimation data was zeroed out and all expected charge codes calculated accurately. | |
| Details: | | |
| ISO Actions | Run the market. Validate the ISO zeroing out estimated meter data. Expected energy will be published on CMRI. Publish recalculation statement. Publish market invoice. | |
| ISO Market Participant Actions | Submit meter data. | |
| EIM Market Participant Actions | Submit updated meter data if desired. Submit interchange information. | |



| Scenario Execution Trade Date(s): TBD | | |
|---------------------------------------|--|--|
| Scenario #3 | Validate Running Simultaneous Settlement Timelines | |
| Description | At a high-level, Scenario 3 will test the calculation and publication of the old and new timelines concurrently for the same invoice. Trade dates (TD) prior to 8/25 will use the current timeline whereas those TDs ran after will use the new timeline. | |
| Expected System Outcome | The ISO systems ability to publish statements for the old and new timelines. The ISO generated invoice will reflect old and new timeline statement details on a single invoice. | |
| Anticipated Settlement Outcome | Participant invoices will reflect invoice details for both the old and new timelines. | |
| Details: | | |
| ISO Actions | Run the market. Expected energy will be published on CMRI. Publish statements. Execute billing run for both old and new timeline. Publish market invoice. | |
| ISO Market Participant Actions | Submit meter data. | |
| EIM Market Participant Actions | Submit updated meter data if desired. Submit interchange information. | |

3. ISO Market Simulation Contact

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