



# Reliability Demand Response Resource Bidding Enhancements

Cynthia Hinman  
Lead Client Trainer

April 11, 2022

4/13/22 – Slides 14 and 16 have been updated to align the hours for raising/lowering the bid cap with the most current version of the market simulation scenarios.

Rev 04/13/22

The information contained in these materials is provided for general information only and does not constitute legal or regulatory advice. The ultimate responsibility for complying with the ISO FERC Tariff and other applicable laws, rules or regulations lies with you. In no event shall the ISO or its employees be liable to you or anyone else for any decision made or action taken in reliance on the information in these materials.

# INTRODUCTION

# Housekeeping



Make sure to keep yourself muted unless you have a question

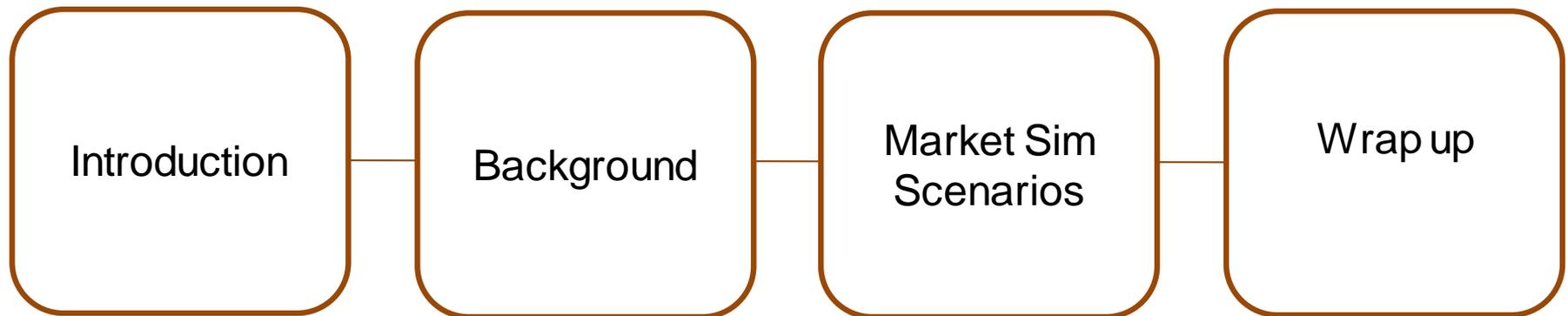


If you have a question, you may either ask over the phone or in the chat



If you want to ask a question, you can virtually “raise your hand” in WebEx

# In today's session we'll cover:



## Poll Question



Which best describes your organization?

- A. Currently submit bids for an RDRR
- B. Implementing an RDRR program in the near future
- C. ISO employee
- D. Other

# BACKGROUND

# What is the Reliability Demand Response Resource program (RDRR)?

- In June 2014 Investor Owned Utilities were required to transition their CPUC-approved retail emergency-triggered demand response (DR) programs to an ISO reliability demand response product
- Enables the ISO to dispatch the emergency-triggered DR programs when and where they are needed
- This program is triggered when there is an EEA2 declaration



To learn more about the Summer Preparedness 2022 initiative visit :  
<http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx>

# What is the issue we are trying to resolve?

- In June 2021 FERC Order 831 was implemented and, in certain situations, enables the energy bid cap to be raised from \$1,000 to \$2,000
- Existing RDRR bidding rules do not address the situation when the energy bid cap is raised
- RDRR Bidding Enhancements Track 1 aligns RDRR bidding rules with real-time conditions consistent with FERC Order 831
  - RDRRs must bid at least 95% of the hard energy bid cap when the energy bid cap is raised to \$2,000/ MWh

To learn more about FERC Order 831 visit :

 <https://stakeholdercenter.caiso.com/StakeholderInitiatives/FERC-Order-831-Import-bidding-and-market-parameters>

## Existing process for SCs with RDRRs in their portfolio

- In real-time, SCs submit a bid in SIBR between \$950 and \$1,000 for their RDRR MW by 75 minutes prior to the start of the trade hour
- If their bid is accepted in the real-time market run they will get paid the LMP for their energy and be prepared to be dispatched for the intervals that they were awarded
- If the bid cap is raised to \$2,000, RDRR bids do not change

## New process for SCs with RDRRs in their portfolio

- Existing bidding process does not change unless the energy bid cap is raised. This can happen because:
  - Resource specific resources have submitted a cost-verified energy bid greater than \$1,000/MWh or
  - The ISO calculated maximum import bid price is greater than \$1,000/MWh
- If the energy bid cap is raised to \$2,000/MWh:
  - The SC will be notified in SIBR that the energy bid cap has been raised
  - The SC re-submits their bid that is between \$1,900 and \$2,000 (at least 95% of the new energy bid cap), or...
  - The SC can do nothing and after the market closes the bid will be increased to reflect the same percent of the new energy bid cap that it had before

# Q&A

# MARKET SIMULATION

# What do I need to do to participate in the market simulation?

- Market simulation is scheduled to begin on **April 19, 2022**
- Register your request to participate in the RDRR Enhancements market sim
  - Request inbox - **MarketSim@caiso.com**
  - Request deadline - **April 7, 2022**



To review the RDRR Bidding Enhancement Market Simulation Document visit :  
<http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx>

# Market Sim Scenario 1 - Increase Energy Bid Cap

- **ISO Action**
  - The ISO will increase the energy bid cap from \$1,000 to \$2,000 for hours ending **16-19**
- **SC Action**
  - When bid cap = \$1,000
    - Submit bids for at least 2 RDRR resources
  - Bid cap is raised to \$2,000
    - Re-submit a bid for 1 RDRR resource
  - Verify clean bids are processed correctly for both resources

## Example - Market Sim Scenario 1

- **ISO** will set the energy bid cap at \$1,000 for the trade hour
- **SC1** will:
  - RDRR1 - submit a \$950 bid in SIBR
  - RDRR2 – submit a \$950 bid in SIBR
- **ISO** will raise the energy bid cap to \$2,000 for the trade hour
- **SC1** will:
  - RDRR1 - Resubmit a bid of \$1,975 in SIBR
  - RDRR2 – No action
- Expected outcome:
  - RDRR1 – Clean bid is \$1,975
  - RDRR2 – Clean bid is \$1,900



\$1,975 is a random number within the RDRR bid range used for this example

# Market Sim Scenario 2 - Decrease Energy Bid Cap

- **ISO Action**
  - The ISO will decrease the energy bid cap from \$2,000 back to \$1,000 for hours ending **18-19**
- **SC Action**
  - When bid cap = \$2,000
    - Submit bids for at least 2 RDRR resources
  - Bid cap is reduced back to \$1,000
    - Re-submit a bid for 1 RDRR resource
  - Verify clean bids are processed correctly for both resources

## Example - Market Sim Scenario 2

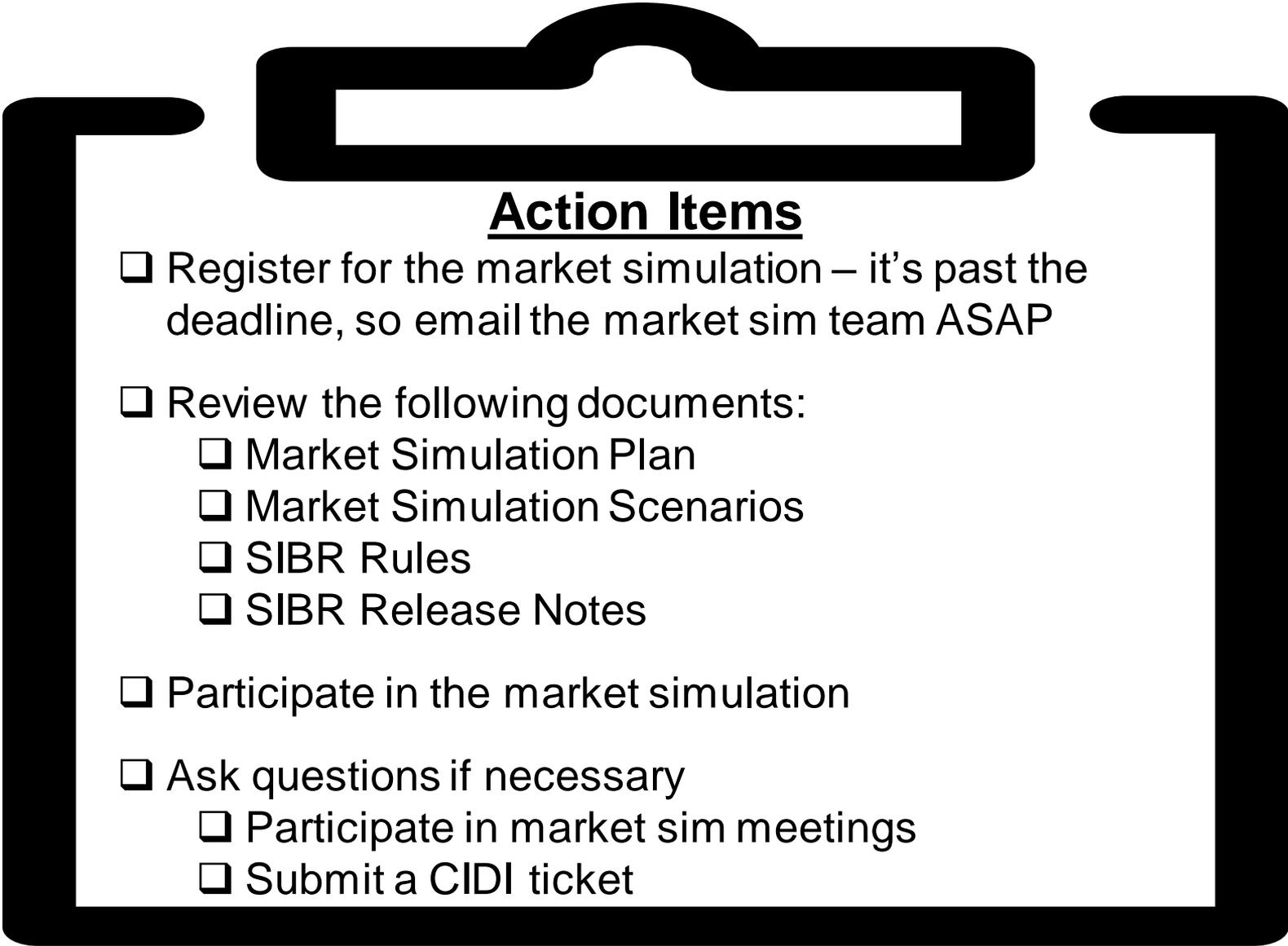
- **ISO** will set the energy bid cap at \$2,000 for the trade hour
- **SC1** will:
  - RDRR1 - submit a \$1,900 bid in SIBR
  - RDRR2 – submit a \$1,900 bid in SIBR
- **ISO** will lower the energy bid cap to \$1,000 for the trade hour
- **SC1** will:
  - RDRR1 - Resubmit a bid of \$975 in SIBR
  - RDRR2 – No action
- Expected outcome:
  - RDRR1 – Clean bid is \$975
  - RDRR2 – Clean bid is \$950



\$975 is a random number within the RDRR bid range used for this example

# Q&A

# WRAP UP



## Action Items

- Register for the market simulation – it's past the deadline, so email the market sim team ASAP
- Review the following documents:
  - Market Simulation Plan
  - Market Simulation Scenarios
  - SIBR Rules
  - SIBR Release Notes
- Participate in the market simulation
- Ask questions if necessary
  - Participate in market sim meetings
  - Submit a CIDI ticket

## Poll Question



Do you have enough information to participate in the RDRR Bidding Enhancements Track 1 market simulation?

- A. Absolutely!
- B. Pretty sure, but I'll check it out on my own to be sure
- C. I still have some questions
- D. I really don't know what to do

# Resources

- RDRR Bidding Enhancements Stakeholder Process Documents
  - <https://stakeholdercenter.caiso.com/StakeholderInitiatives/Reliability-demand-response-resource-bidding-enhancements>
- RDRR Bidding Enhancements Release Planning Documents
  - <http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx>
- SIBR Release Notes Spring 2022 Base and SIBR Business Rules
  - <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=44B2EDC7-B396-4256-9D15-21EAE1D9AF70>

# Final Q&A



**Thank you for your participation!**

For more detailed information on anything presented, please  
visit our website at:

[www.caiso.com](http://www.caiso.com)

Or send an email to:  
CustomerTraining@caiso.com