



Price Formation Enhancements

Rules for Bidding Above the Soft Offer Cap


Working Group Session #18

May 2, 2024

Housekeeping reminders

- This call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without ISO's permission.
- This collaborative working group are intended to stimulate open dialogue and engage different perspectives.
- Please keep comments professional and respectful.
- Please try and be brief and refrain from repeating what has already been said so that we can manage the time efficiently.
- If you need technical assistance during the meeting, please send a chat to the event producer

Instructions for raising your hand to ask a question

- If you are connected to audio through your computer or used the “call me” option, select the raise hand icon  located on the bottom of the participant panel of your screen.
 - **Phone-line:** press *3 only works if you dialed into the meeting.
 - Please remember to state your name and affiliation before making your comment.
- You may also send your question via chat to Brenda Corona or to all panelists.

Today's Agenda

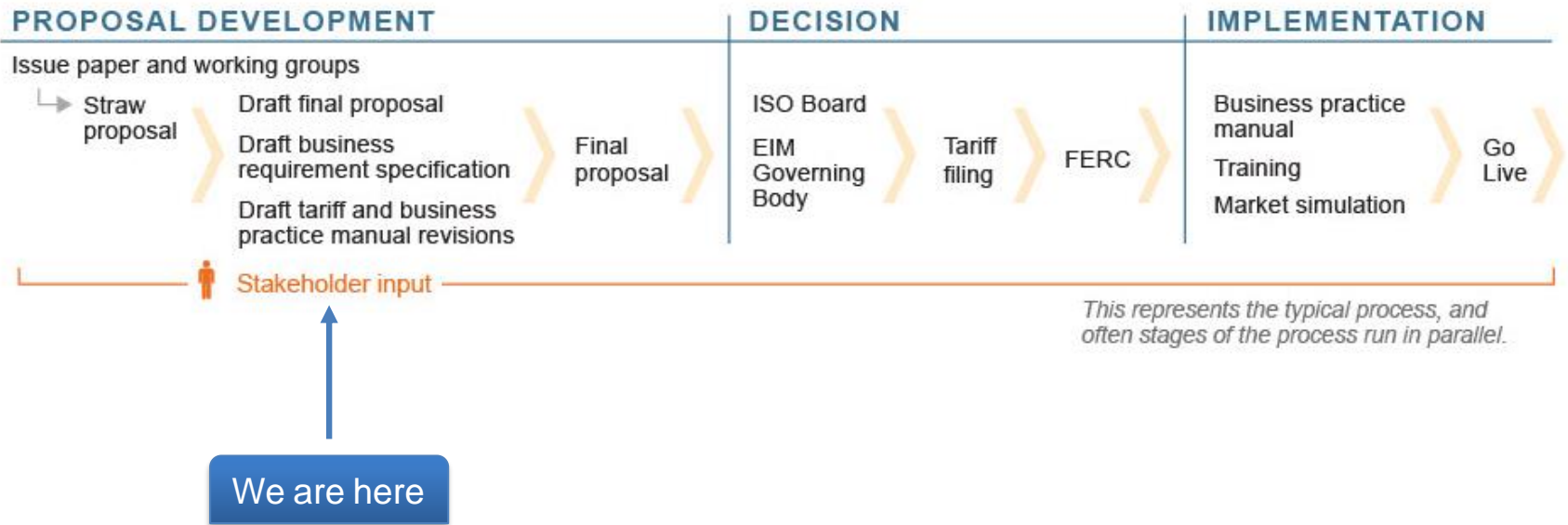
Time	Topic	Presenter
10:00 – 10:05	Welcome, Today's Agenda, Stakeholder Process Overview	Brenda Corona
10:05 – 10:15	Today's Goals	Juan Buitrago
10:15 – 11:55	Draft Final Proposal on Rules for Bidding Above the Soft Offer Cap <ul style="list-style-type: none">• Background• Proposed changes for summer 2024• Monitoring of Interim Solution• Long Term Enhancements	Sylvie Spewak
11:55 – 12:00	Next Steps	Brenda Corona

Goals of Today's Call

The Working Group structure is meant to embrace flexibility to allow organic and robust conversation on the topics at hand – it is still key for us to drive towards solutions collaboratively

- **ISO Presentation of Draft Final Proposal**
 - Presentation of ISO proposal for Interim solution (target Summer 2024)
 - Receive feedback on the stakeholder community
- **Stakeholder Community discussion on Longer Term Enhancements**
 - Opportunity to discuss the longer term robust solution in a continued policy development conversation

ISO Policy Initiative Stakeholder Process



Stakeholder meetings, working groups and workshops may occur throughout the stakeholder process.

- Draft Final Proposal Posted on May 1st, 2024



California ISO

Draft Final Proposal

Sylvie Spewak
Senior Policy Developer

May 2, 2014

Timeline for Policy Development

Date	Milestone	
April 22, 3pm	Straw Proposal slides	✓
April 23, 9-12	Straw Proposal working group call	✓
April 24, 2-5pm	Market Surveillance Committee discussion	✓
May 1, 2024	Target Draft Final Proposal	✓
May 2	Draft Final Proposal working group	✓
May 15th	<i>Tentative</i> Market Surveillance Committee discussion	
TBD	Market Surveillance Committee Opinion	
May 21-23	Board Week	
May 24, 2024	Target File at FERC	

*This schedule assumes a regular 60 day FERC review

Default energy bids are resource specific verified costs

- FERC Order No. 831 requires that
 - each resource's bid is subject to a soft offer cap of \$1,000/MWh
 - Bids above \$1,000/MWh must be cost-verified by the ISO or market monitor
 - Verified cost-based incremental energy offers be capped at \$2,000/MWh
- Bids above \$1,000/MWh in ISO markets today are
 - capped by the higher of \$1,000/MWh or **default energy bid (DEB)**
 - DEBs represent resource's costs based on information known to the ISO
 - DEBs are also capped at \$1,000/MWh

Default energy bids are resource specific verified costs

- The DEB mirrors a resource's specific competitive marginal costs in the market in conditions when market participants might have market power
- DEBs are a single value, calculated pre-market, but we expect some variation between expected and actual costs
- The ISOs reference level change request (RLCR) process allows market participants to update the costs reflected through their DEBs and commitment cost bid caps
- Two options—the manual and automated RLCR process—can be leveraged whenever a generator wishes to request that the ISO use a different fuel or fuel-equivalent cost whether bidding above the soft offer cap or not

The RLCR process does not yet accommodate requested changes to opportunity costs

- Energy storage and hydro resources are not effectively able to use the RLCR process today
 - The \$1,000/MWh cap may limit the ability of these resources to fully reflect the costs defined in DEBs
 - Resources cannot adjust their DEBs in response to intra-day opportunity costs
- These resources cannot adjust their DEBs beyond the single value calculated for each day, but enhancements to the RLCR process will be technology and policy resource intensive.

Proposals to increase bidding flexibility

- **Revise the cap on all Default Energy Bids from \$1,000/MWh to \$2,000/MWh (“Uncap the DEB”).** This would allow hydro resources to bid up to a value that reflects the opportunity costs above \$1,000/MWh as defined by their DEB
- **Modify the bid cap for energy storage resources to provide comparable bidding flexibility using a proxy value**

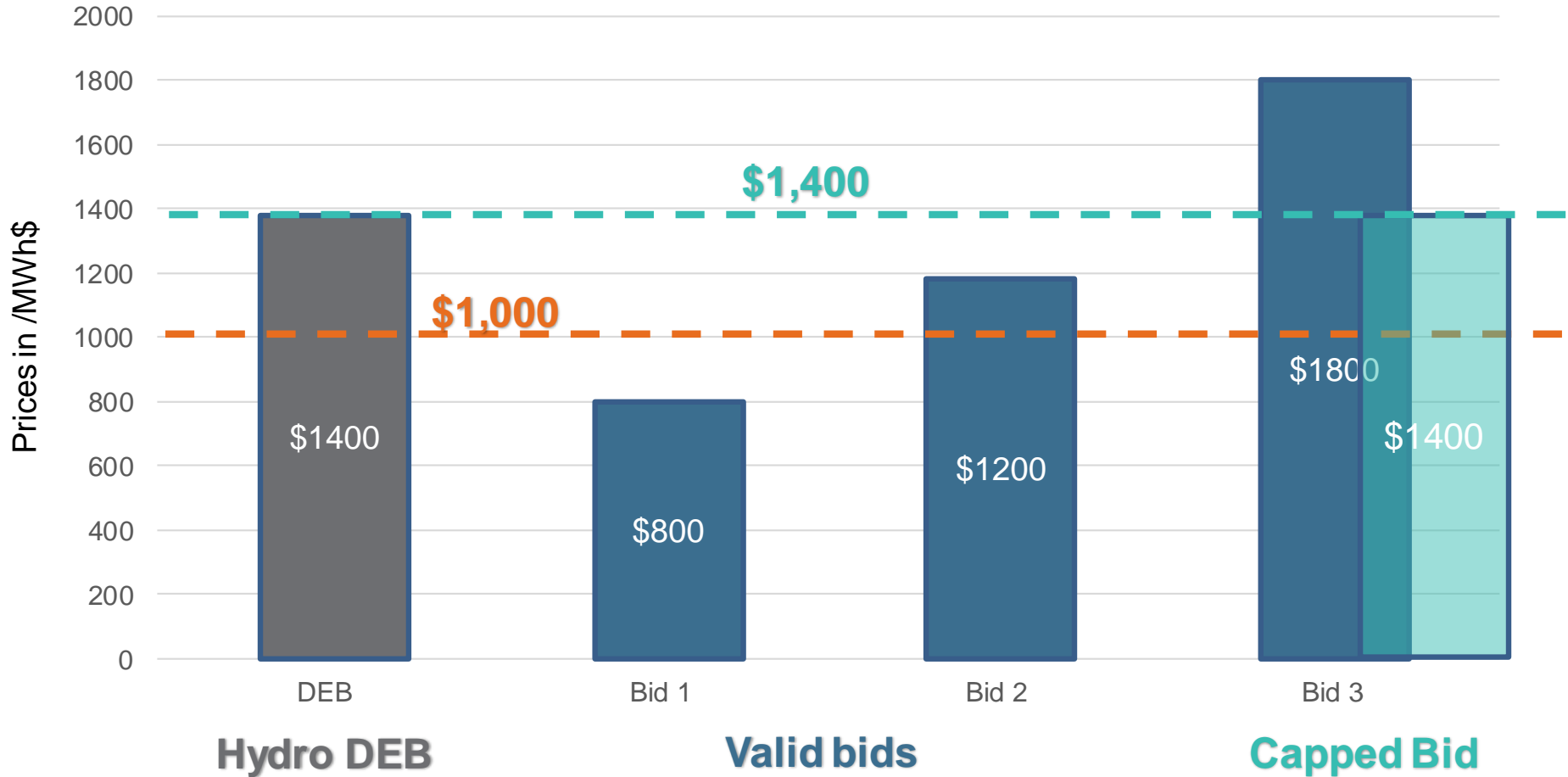
“Uncap the DEB”

- This would allow hydro resources to bid up to a value that reflects the opportunity costs already defined in their DEB
- The DEB as the cap for bids above \$1,000/MWh is unconditional on other factors besides the DEB
- Resources would not have to take action to verify these costs, but would still use the RLCR process to make DEB adjustments in response to intra-day costs

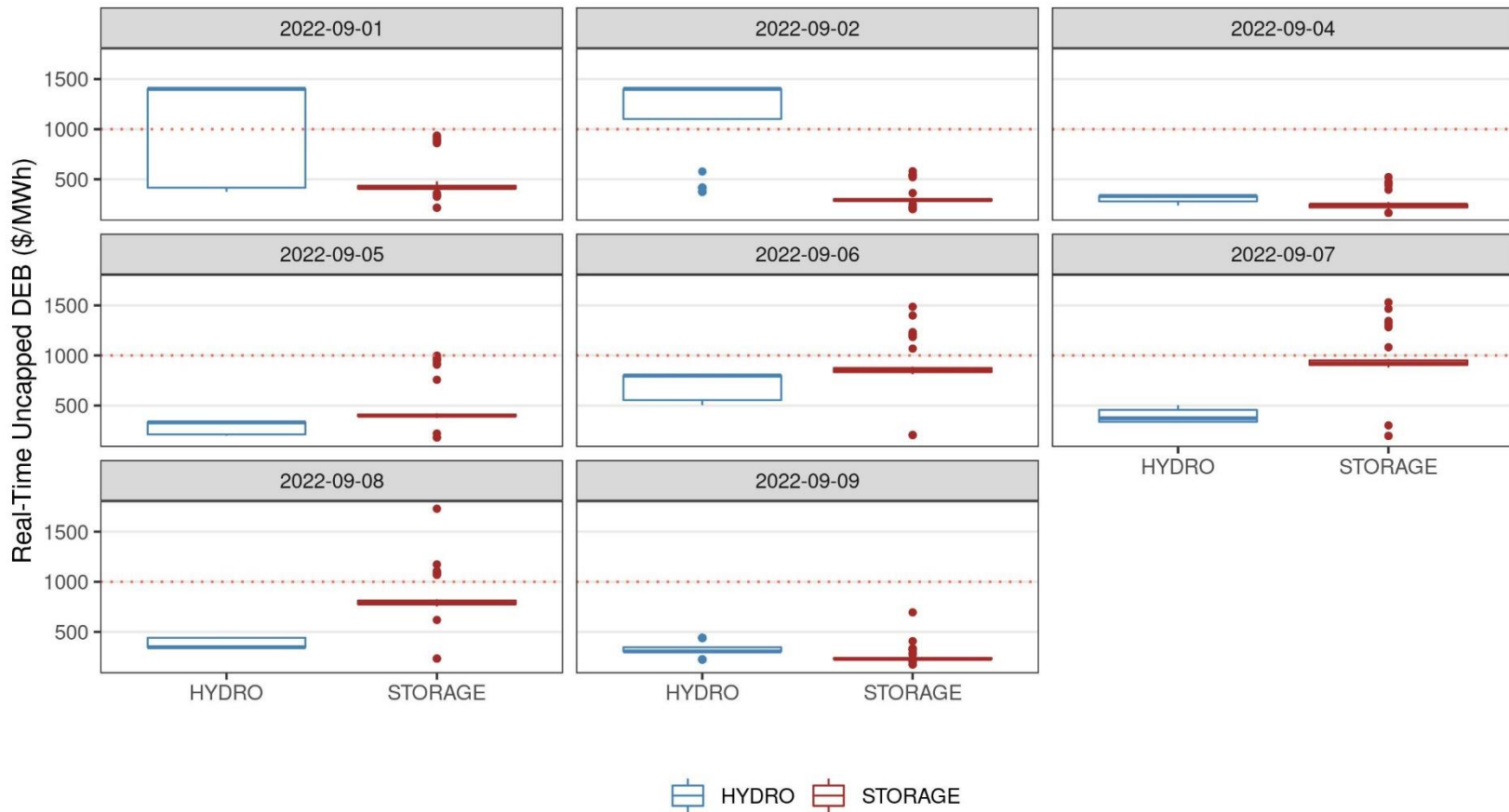
“Uncap the DEB”

- **Scope:** all resources with DEBs in WEIM, both day ahead and real-time
- **Uncap the DEB:** Revise the cap on all DEB calculations from \$1,000 to \$2,000/MWh
 - Market power mitigation: if mitigated, bid is reduced to the $\min(\text{bid}, \text{DEB})$
 - Bidding above the soft offer cap: a bid above \$1,000 is capped by $\max(\$1000, \text{DEB}, \text{adjusted DEB})$

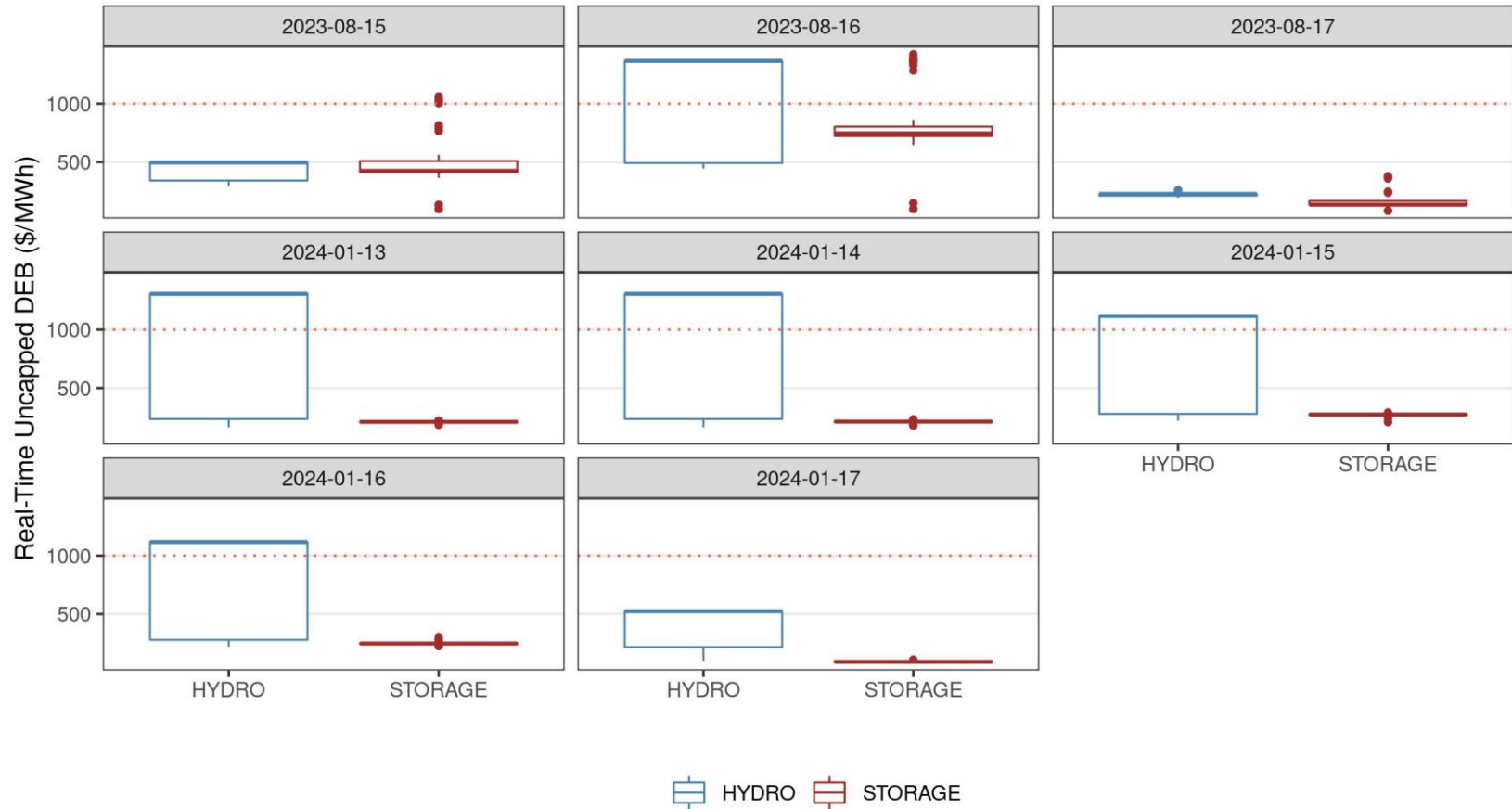
The DEB becomes the resource specific bid cap



Counterfactual hydro DEBs exceed \$1,000/MWhs



Counterfactual hydro DEBs exceed \$1,000/MW hs



“Uncap the DEB” is foundational to all further enhancements

- This is a process change, not a value change
 - No change to the basis for calculating reference costs as described by the ISO’s tariff
 - Supporting information and validation still required to support DEB adjustments
- This proposal will simplify and support additional interim rules as well as future enhancements to the RLCR process:
 - Refinements to DEB calculations
 - Modifications to the RLCR process to facilitate DEB adjustments

Modify the bid cap for energy storage resources using a proxy value

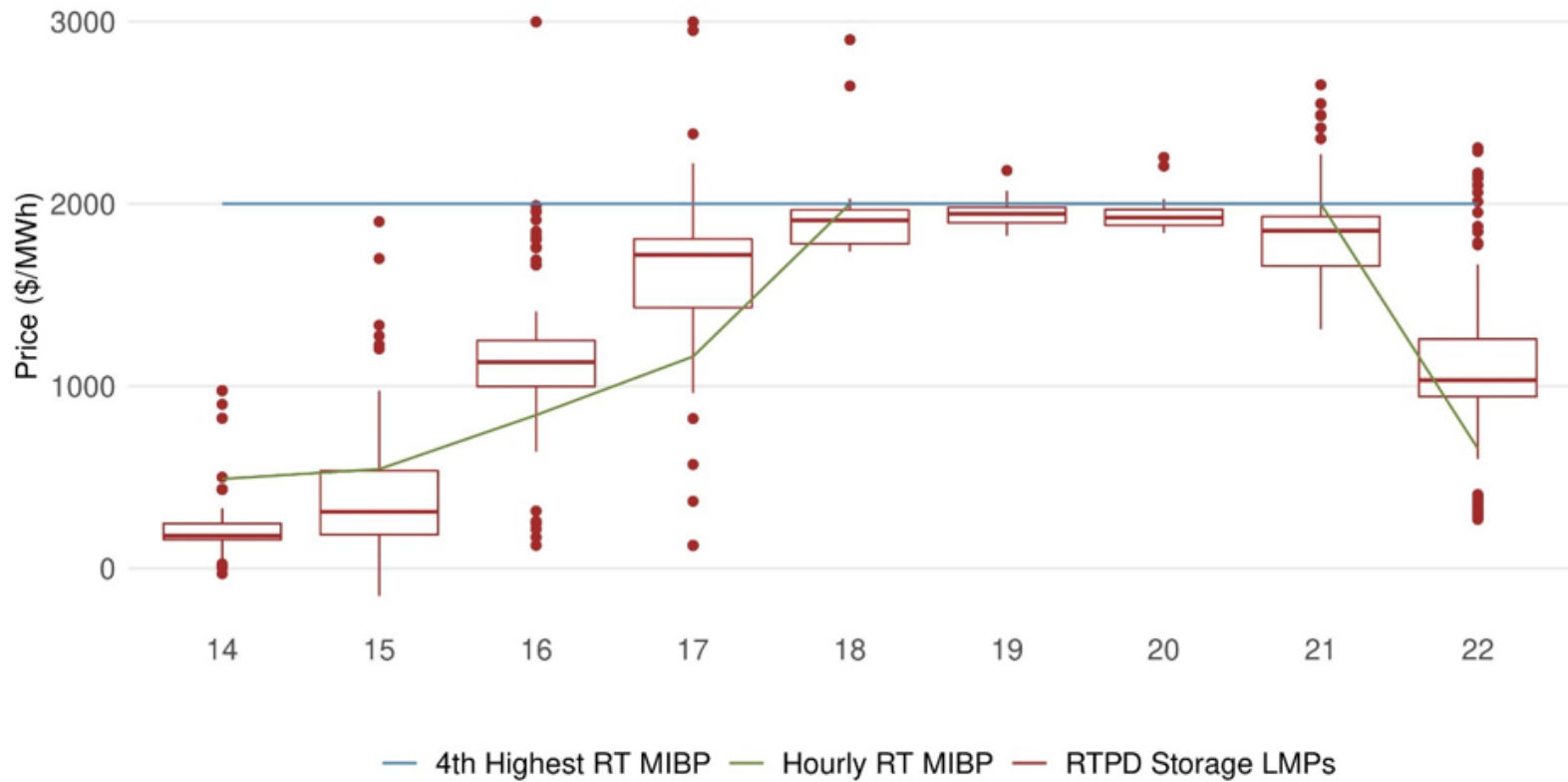
- In the near term, bidding rules under the “uncap the DEB” proposal cannot be applied to storage resources
- An interim solution provides storage with additional bidding flexibility to reflect opportunity costs above \$1,000/MWh, including intra-day opportunity costs

Modify the bid cap for energy storage resources using a proxy value

- **Scope:** all battery storage resources with DEBs in WEIM, both day ahead and real-time
- The DEB is uncapped, and can go above \$1,000/MWh
- **Bidding rules:** Cap bids over \$1,000/MWh by the higher of \$1,000/MWh, the 4th highest MIBP, and the highest cost-verified bid
 - Market power mitigation: if mitigated, bid is reduced to the $\min(\text{bid}, \text{DEB})$.
 - If a resource cannot bid above \$1,000/MWh, the DEB above \$1,000/MWh does not get considered

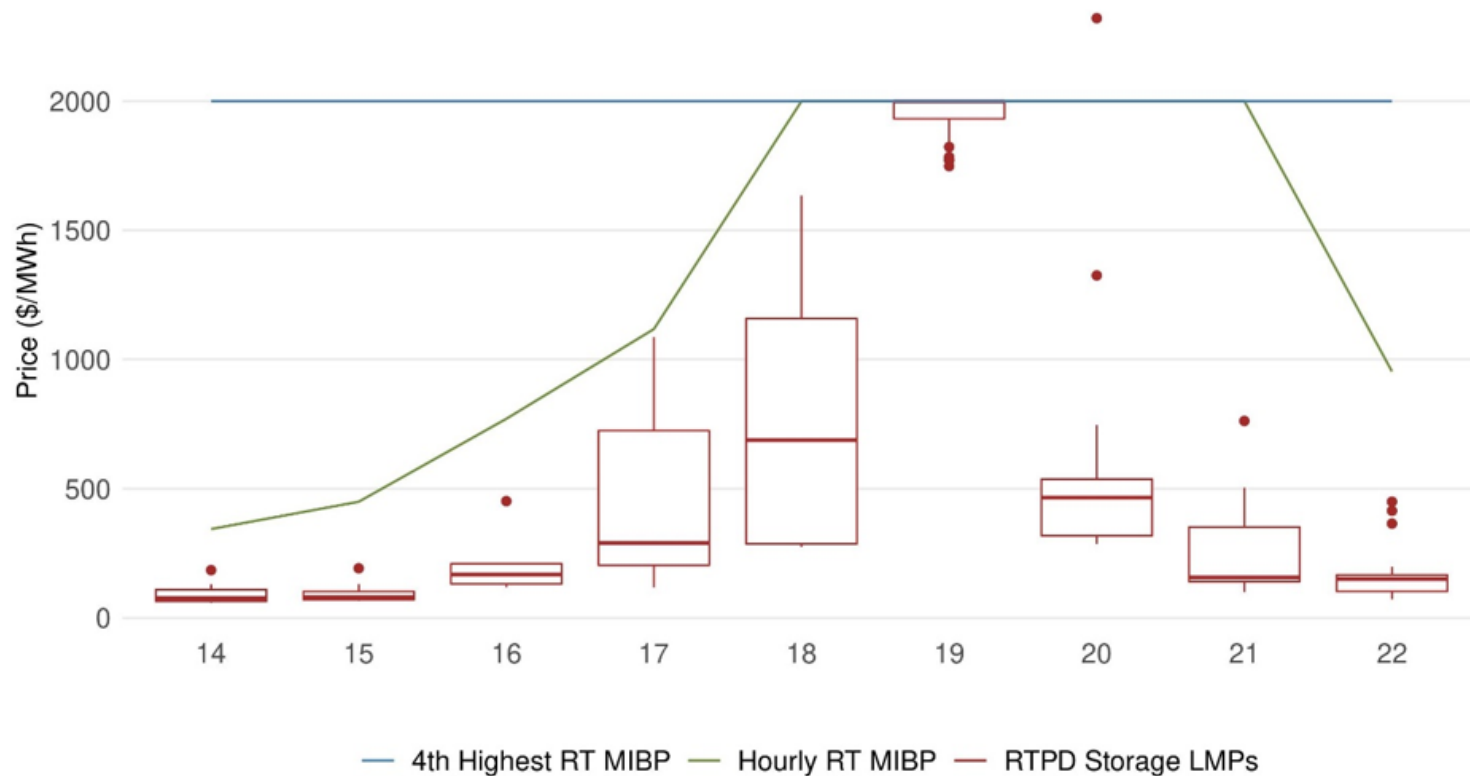
MIBP analysis

Figure 7. Comparison of real-time storage LMPs and MIBP values, September 6, 2022



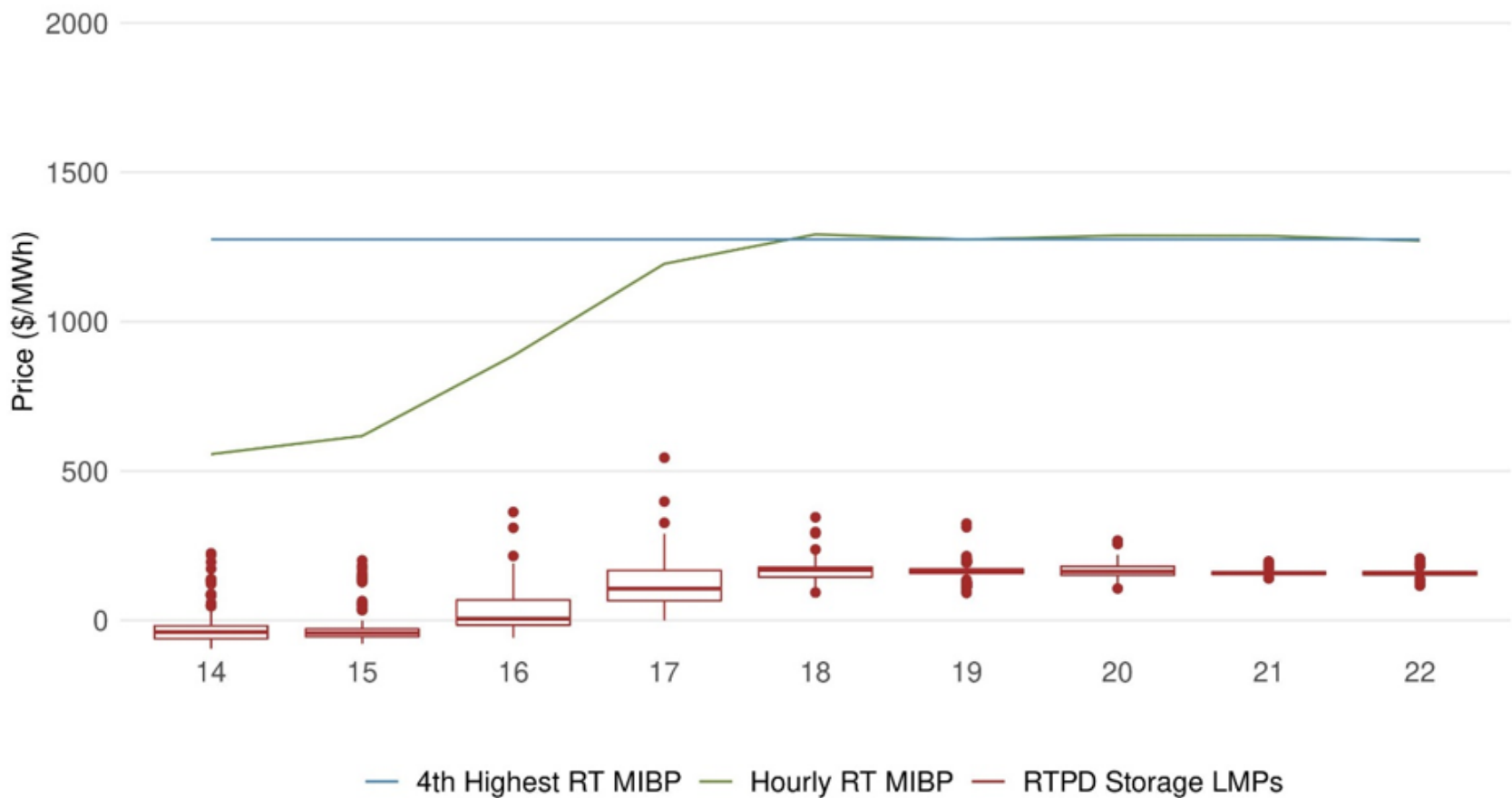
MIBP analysis

Figure 8. Comparison of real-time storage LMPs and MIBP values, August 16, 2023



MIBP analysis

Figure 9. Comparison of real-time storage LMPs and MIBP values, January 14, 2024



Monitoring and Evaluation

- The ISO proposes to monitor the use of the new bidding flexibility enabled through this proposal and consider associated market results in any evaluation of future market reforms

Next Steps

- May 01, 2024 Draft final proposal posted (rules for bidding above soft offer cap)
- May 08, 2024 Comments due of Draft Final Proposal
- May 10, 2024 Comments due on working group session 16

- Visit Price Formation Enhancements Working Group initiative webpage for more information:
<https://stakeholdercenter.caiso.com/StakeholderInitiatives/Price-formation-enhancements>

- If you have any questions, please contact Brenda Corona at bcorona@caiso.com or isostakeholderaffairs@caiso.com



SAVE THE DATE

2024 STAKEHOLDER SYMPOSIUM

OCT. 30, 2024
SACRAMENTO, CA

The California ISO Stakeholder Symposium will be held on Oct. 30, 2024 at the Safe Credit Union Convention Center in Sacramento, California.

A welcome reception for all attendees will be held the evening of Oct. 29.

Additional information, including event registration and sponsorship opportunities, will be provided in a future notice and on the ISO's website.

Please contact Symposium Registration at symposiumreg@caiso.com with any questions.



A new **caiso.com** is coming in late May

Training sessions will be held on
May 23 from 9:00 a.m. – 10:00 a.m.
May 29 from 10:00 a.m. – 11:00 a.m.

Watch the Daily Briefing for details and
follow us on social media.