



California ISO

Discretionary initiative prioritization

Working Group 2

Annual policy initiatives roadmap process 2024

May 8, 2024

Housekeeping reminders

- This call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without the ISO's permission.
- This collaborative working group is intended to stimulate open dialogue and engage different perspectives.
- Please keep comments professional and respectful.
- Please try to be brief and refrain from repeating what has already been said so that we can manage 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 your screen.
 - **Note:** (*star-three*) *3 works if you dialed by phone 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.

Prioritization working group #2 agenda overview

- Western Energy Imbalance Market Regional Issues Forum
Annual Policy Initiatives Catalog and Roadmap – 2024
Roundtable Report to the Western EIM Governing Body
- Discretionary initiative presentations
 - Explanation of submitted initiative
 - Impact of proposed change on market
 - Benefits & distribution of benefits
 - Costs & distribution of costs
 - Impact to market efficiency/reliability

Discretionary initiative presentations: Western Energy Imbalance Market

Time	Topic	Entity
1:45 – 2:00	Operational Enhancements in the WEIM	BPA
2:00 – 2:15	Settlement Enhancements in the EIM	BPA
2:15 – 2:30	Automated approval of outage changes in EIM	BPA
2:30 – 2:45	De minimis threshold for WEIM RSE	IPC, PAC, PGE, SMUD (ISO)
2:45 – 3:00	Bidding rules on external WEIM interties	IPP (Girdwell)
3:00 – 3:15	Base scheduling below Pmin enhancement	SRP (ISO)
3:15 – 3:30	Accounting for upward transition costs in settlements after economic commitments to lower configurations	SRP (ISO)

WESTERN ENERGY IMBALANCE MARKET (WEIM)

Regional Issues Forum

CAISO Annual Policy Initiatives Roadmap Process - 2024:
Discretionary Initiative Prioritization Working Group 2

Overview and Summary of Roundtable Report to the WEIM
Governing Body

May 8, 2024



Regional Issues Forum Roundtable – Background and Process Overview

- Final Proposal for WEIM Governance Review – Phase 3 (EDAM)
 - Expanded role for the RIF in identifying and prioritizing discretionary policy initiatives
 - “Roundtable discussion” of sector priorities prior to CAISO publication of proposed policy initiative prioritization
- CAISO Policy Initiatives Catalog and Roadmap Process Enhancements (Dec. 20, 2023)
 - Discussion of enhanced process for prioritization of initiatives, including expanded stakeholder collaboration and alignment with CAISO internal planning
 - RIF roundtable included as a step in CAISO prioritization process

Regional Issues Forum Roundtable – Background and Process Overview

- First annual roundtable meeting – March 18, 2024
- Liaisons for each sector presented sector-level input regarding themes, issues, and priorities
 - Based on review of stakeholder comments and initiatives submitted to the CAISO, sector meetings and communications, and requests for input on process and approach
 - Initial synthesis of common priorities among sectors
 - Remarks on behalf of the Body of State Regulators, the WEIM Governing Body, and ISO management, and public comment
- Roundtable report published on April 30th
 - Available at https://www.westerneim.com/Documents/Regional_Issues_Forum_Policy_Roundtable_Report.pdf

Policy Initiative Priorities – Common Themes

- Support for continuation of ongoing CAISO initiatives
 - Price Formation Enhancements
 - Greenhouse Gas Coordination
 - Gas Resource Management
 - Resource Adequacy Modeling and Program Design
- Bid cap limitations for Non-Generator Resources
 - Priority for multiple sectors
 - Support for both expedited consideration of measures for summer 2024 and longer term solutions
 - CAISO has since transitioned this issue to policy development

Policy Initiative Priorities – New Policy Initiatives

- Sector support for initiation of new policy initiatives
 - Resource Sufficiency Evaluation-related topics
 - Including reengagement on RSE Enhancements Phase 3
 - Intertie trading enhancements
 - CAISO Transmission Planning Process Enhancements
 - Including reengagement on previously-commenced initiative and/or new initiative
 - Enhancements of rules related to demand response
 - Including, but not limited to, participation rules of Reliability Demand Response Resources

Policy Initiative Priorities – Cross-Cutting Priority Topics

- High priority topics not specific to any one initiative
 - Consideration of issues related to management of seams with respect to market policy and design
 - Reconciliation of CAISO roles as market operator and balancing authority/transmission operator
 - Governance rules and stakeholder engagement in expanded market
- Some initiatives are focused on WEIM and Extended Day Ahead Market issues and topics while others are specific to the CAISO
 - Prioritization will require balancing of interest and priorities with emphasis on transparency

Western EIM Entity Sector Priorities

- Supports continuation of Price Formation Enhancements, GHG Coordination, and Gas Resource Management initiatives
- Supports commencement of new initiatives related to RSE, DR, storage, metering, settlement, and resource modeling and dispatch
- Encourages CAISO to provide clarity on how effectiveness of new Catalog/Roadmap Process will be measured
- Need for process to address urgent initiatives

California ISO Participating Transmission Owner Sector Priorities

- Supports new initiatives related to
 - Enhancements to ancillary services participation
 - Long duration energy storage
 - DR enhancements, including Reliability Demand Response Resources improvements
 - CAISO balancing authority area reliability
 - Including consideration of issues related to day-ahead self-scheduling
 - Enhancements to Maximum Import Capability calculation and allocation methodologies

Consumer-Owned Utilities Sector Priorities

- Supports continuation of existing initiatives
 - Price Formation Enhancements, Storage Enhancements, GHG Coordination, Gas Resource Management, and RA Modeling and Program Design
- Supports new initiatives to address topics of transmission planning and Congestion Revenue Rights enhancements
- Emphasizes consideration of seams and delineation of CAISO role as cross-cutting themes
- Includes detailed recommendations for process improvements and areas for procedural clarification

Independent Power Producers & Marketer Sector Priorities

- Supports continued consideration of the following issues:
 - Bidding rules on external WEIM interties
 - RSE Enhancements Phase 3
 - Price Formation Enhancements
 - Market Clearing Prices in Contingency Events
- Supports the following new initiatives:
 - Stakeholder process improvements
 - Energy storage topics: bidding rules, outage management, foldback modeling, and mitigation enhancements
 - GHG functionality improvements
 - Load conformance and intertie transaction improvements
 - Transmission Planning Process enhancements

Public Interest Organizations and Consumer Advocates Sector Priorities

- The PIO/Consumer Advocates Sector supports consideration of the following topics in new initiatives:
 - Proposals to enhance the CAISO's competitive solicitation process in the Transmission Planning Process
 - Enhancements to rules related to Reliability Demand Response Resources
- Also supports consideration of issues related to seams between the WEIM and other emerging market structures in the West

Power Marketing Administration Sector Priorities

- Supports continuation of Price Formation and GHG Coordination initiatives, and reengagement on the RSE Enhancements Phase 3 topics
- Supports initiative to improve operational and settlement functionality
 - Address process for resolution of disputes and inappropriate or anomalous market outcomes
 - Consideration of dual submittals of base schedules and a WEIM entity to set default limits for dynamic and static ETSRs
- Urges prioritization of seams considerations in the operating horizon

Next Steps for the Regional Issues Forum in the Policy Roadmap Prioritization process

- The RIF will continue to monitor and engage in the policy roadmap prioritization process
- RIF will work with CAISO staff to identify lessons learned and incorporate process changes into next year's process

Questions and Discussion

RIF Sector Liaisons

SECTOR	NAME	ORGANIZATION	EMAIL
EIM entities	Lindsey Schlekeway	NV Energy	lindsey.schlekeway@nvenergy.com
	Josh Walter	Seattle City Light	josh.walter@seattle.gov
ISO participating transmission owners	Jonathan Rumble	Southern California Edison	jonathan.rumble@sce.com
	Meg McNaul	Six Cities	mmcnaul@thompsoncoburn.com
Public Interest/Consumer Advocate	Vijay Satyal	Western Resource Advocates	vijay.satyal@westernresources.org
	Jaime Stamatson	Montana Consumer Counsel	jstamatson@mt.gov
Consumer-owned utilities located within an EIM BAA	Lauren Tenney Denison	Public Power Council	tenney@ppcpdx.org
	Doug Boccignone	Flynn Resource Consultants Inc.	dougbocc@flynnrci.com
Independent power producers and marketers	Rahul Kalaskar	AES Corporation	rahul.kalaskar@aes.com
	Scott Olson	Avangrid Renewables	scott.olson@avangrid.com
Federal power marketing administrations	Allison Mace	Bonneville Power Administration	armace@bpa.gov

Discretionary initiative presentations: Western Energy Imbalance Market

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Operational Improvements:

Base ETSR Submissions

EIM Transfer Default Limits

David Silver

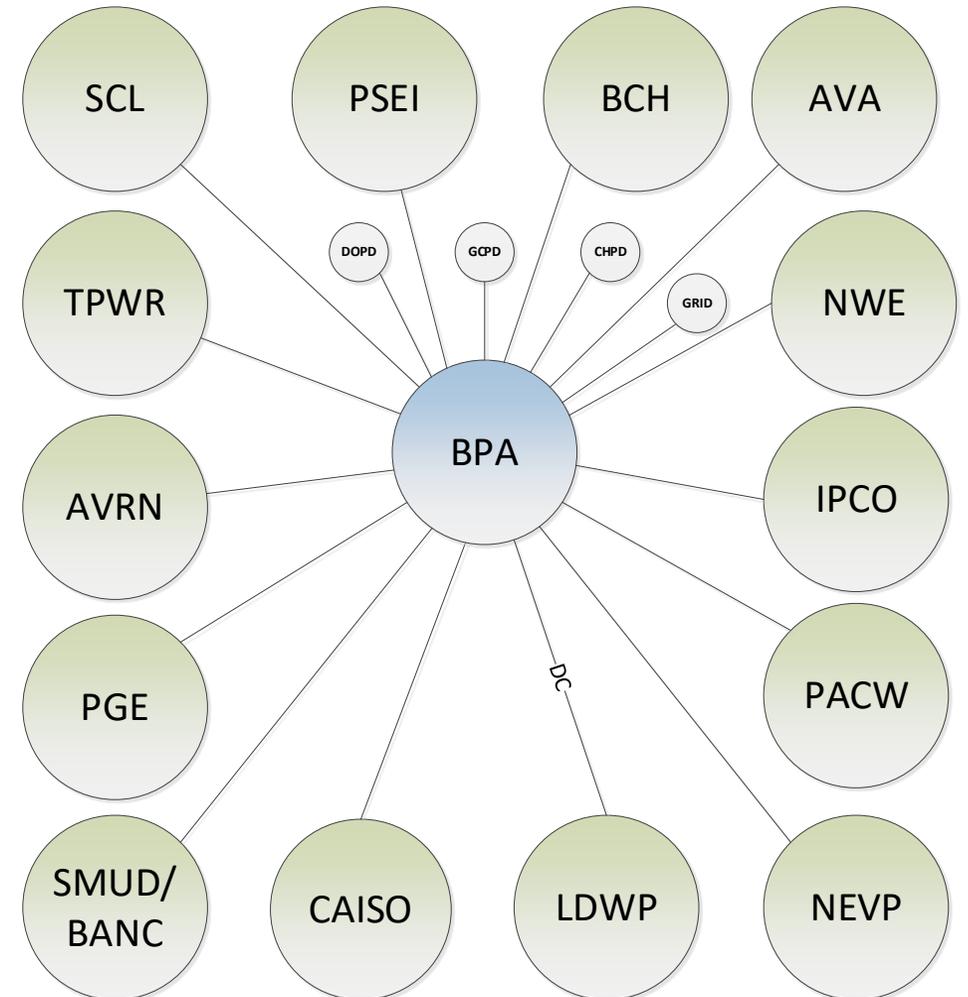
Bonneville Power Administration

May 8, 2024



BPA and WEIM

- BPA joined the WEIM on May 3rd, 2022
- BPA has 18 adjacent BAAs, 13 of which are WEIM entities
 - 14 if you include CAISO
- BPA is the submitting entity for all Base ETSRs with our adjacent WEIM Entity BAAs as well as Mirrors with CISO
- BPA has WEIM Transfers with 11 entities
- BPA has presented on this proposal on 12/2022 and 12/2023



Base ETSR Submissions

- On a handful of occasions since go-live, BPA has been unable to submit/update Base ETSR schedules and/or Pre-Hour RTSI information for one or more hours
- The reasons have been varied from data integration issues to hosted software vendor outages
- While numerous enhancements have been made to improve the reliability and stability of the systems used, these types of events will occasionally occur
- These issues are not unique to BPA, but given the number of EIM adjacencies the impacts can be significant when they occur

Base ETSR Submissions (cont.)

- Currently the WEIM can only support one entity to be the submitting party for Base ETSR schedules, pre-hour RTSI, and ATF
- When the submitting party is unable to perform that role, there are numerous potential impacts:
 - A degradation of the WEIM's view of the impacted BAA's power balance
 - Potential deployment of regulation energy and/or ABC (ACE impacts)
 - Inaccurate Imbalance settlements and difficulty shadowing market results
 - Settlement disputes

Base ETSR Submissions (cont.)

- The question is what solutions can be employed when this occurs, not just for BPA and it's adjacencies but for any entity that is the submitting party
- Current Recommendation:
 1. All entities submit and the RTMO selects which dataset to use (Base and RTSI)

1) All Entities Submit

- In this option, all entities would submit Base ETSR schedules and RTSI data. The RTMO would select which submittal to use
- Benefits:
 - Provides redundant feed of data
 - Increases resilience and accuracy of data in the WEIM
 - Allows RTMO to identify submittal discrepancies and contact entities as appropriate
- Cons:
 - Require a robust procedure to ensure the RTMO selects the appropriate feed based on entity guidance or other objective criteria
 - Requires a CISO software enhancement
 - May require entity software enhancements

Communications

- Making sure impacted entities are informed of these types of events in a timely manner is critical
- BPA has worked with the RTMO to create a Northwest Everbridge group consisting of all of BPA's adjacent EIM Entity BAAs
- BPA has added internal procedures to make sure the loss of Base ETSR scheduling ability is clearly communicated to the RTMO and then to all impacted entities using the Northwest Everbridge group

Conclusion

- BPA has presented on this topic twice over the years (12/2023, 12/2024)
- Seeking a long-term robust solution
- BPA has worked to reduce downtime and mitigate instances
- Short-term interim solutions should be considered

EIM Transfer Default Limits

- The current WEIM default EIM Transfer limit is 99999
 - Currently both the source and sink WEIM BAAs submits separate limits and the WEIM enforces the lowest limit
 - BPA submits limits that are consistent with the transmission rights made available and the supporting e-Tags
- Any failure by the submitting entities or CAISO causing this default to be used has numerous impacts
 - Limits are in excess of physical ability of the transmission system to support the transfers
 - Limits are in excess of the transmission rights on the Dynamic e-Tags supporting the WEIM transfers

EIM Transfer Default Limits

- By establishing a default limits of 0, or if some entities prefer a non-zero default, the problems we experienced in the past will be avoided and ensure the WEIM does not produce transfers that aren't either physically or commercially infeasible.
- BPA first requested this enhancement in 3/2022 (prior to our go-live)
- Example 1: 8/23/2022; CAISO had a problem processing limits. This was due to some internal WEIM software failures. Had a large impact on all entities in the market

Conclusion

- Default Dynamic ETSR limits should be set to a value that is safe when defaults are used.



Settlements Enhancements

Elsa Chang

Bonneville Power Administration

May 8, 2024



Assess and improve CAISO practices regarding resolving settlements issue or disputes

- Currently CAISO requires the price correction request to be submitted within 5 calendar days.
- Operational issues are often so complicated it takes time to investigate, figure out the root cause, and properly identify settlement impacts.
- The old Settlement timeline provide a T+3B and T+7B settlement so an entity at least had some data within 5 days. With the new settlement timeline, statements are not available until 9 BDs.
- The current 5-day requirement does not allow enough time for the entity to review statements and perform data analysis to figure out the need for price corrections.
- Example: March 2023 when CAISO introduced software issues that caused all our TIDs and GHOSTS and MIRRORS to be incorrect. BPA did not discover what was happening until it was outside of the 5-day window.
- Would like to assess and improve CAISO practices regarding resolving settlements issue or disputes allowing price adjustments more than 5 days after operating day (ideally 15 days).

Review policies and practices regarding resolution of adjusting market and settlement-related financial outcomes.

- Price correction is almost always the only approach to adjust settlements after system/data issues. Volume correction is seldom granted because of the complexity of re-running the market. This makes the settlement adjustment ineffective.
- We understand the desire to avoid the complexity of going back to the market solution and figuring out what would have been different if those values had been in place, but there should be some middle ground. Would like to see CAISO working with BAs to come up with some solution that provides an opportunity to make things right.
- An alternative settlement adjustment method could be: If an entity submitted an incorrect base ETSR that resulted in a charge and credit, but both entities agree that the ETSR submitted was wrong. CAISO could develop practices to move that money around as a settlement adjustment between the BAs.



Outage Management Enhancement

Elsa Chang, Bonneville Power
Administration

May 8, 2024



Proposed Outage Management Enhancement

- CAISO's outage approval process involves a manual approval that introduces delay in updating the outage data to customers which considerably impedes outage processing.
 - Are these delays associated with the ISO running outage studies?
 - Does the ISO run studies on every outage submission?
- Outages remaining in Pending state leads to outdated outage data in WebOMS causing outage conflicts and delays in processing new outage entries
- Outage cancellations should be auto-approved at a minimum



Questions





California ISO

Resource Sufficiency Evaluation De Minimis Band Enhancement

IPC, PAC, PGE, SMUD (ISO)

[California ISO - All comments \(caiso.com\)](https://caiso.com)

Resource Sufficiency Evaluation De Minimis Band Enhancement

- This enhancements would create a *de minimis* band that if scheduling coordinators fail the RSE by a *de minimis* amount, such as 10 MW or less, the entity is not deemed to have failed the entire test and can still participate in the EIM.
- Such *de minimis* failures are insignificant and should not cause reliability concerns if they actually materialize.
- This *de minimis* band would be similar to the RSE Tier 1 failure thresholds in EDAM.

Resource Sufficiency Evaluation De Minimis Band Enhancement

- The proposed initiatives are not in response to regulatory requirements.
- The RSE *De Minimis* Band Enhancement aligns with the EDAM market design.
- Consequences of not addressing the *de minimis* RSE issue may result in unnecessary EIM transfer restrictions and
- at times when the entity is opted in to the AET program, unnecessary financial penalties for small, nonmaterial failure amounts.



Bidding rules on external WEIM interties

IPP and Marketers Sector (Girdwell)

[California ISO - All comments \(caiso.com\)](https://www.caiso.com)



Base scheduling below Pmin enhancement

Salt River Project (ISO)

[California ISO - All comments \(caiso.com\)](https://www.caiso.com)

Base Scheduling Below Pmin Enhancement

- This initiative was submitted by SRP for the 2022 catalog and is being resubmitted for 2023.
- In the Spring 2021, SRP participated in Market Simulation to test the ability to submit base schedules below Pmin to account for startup energy.
- During the simulation, SRP worked with CAISO to identify that the Startup Ramp Time parameter specified in the Generator Resource Data Template (GRDT) was not flexible enough to allow the use of warm and cold startups.
- This parameter is required to be the same as or shorter than the hot startup time registered.
- Therefore, for warm or cold startups, this parameter does not represent the true startup ramp time required to get to Pmin.

Base Scheduling Below Pmin Enhancement

- Test results from Market Simulation indicated that base scheduling below Pmin for additional hours beyond the startup ramp time would be unexpected by the market, and startups would therefore not be able to be scheduled.
- The internal DOT would then be zero for the hours beyond the duration of the Startup Ramp Time.
- A solution to this would be to allow for the submission of hot, warm, and cold Startup Ramp Time parameters in the GRDT, though other options may exist as well.

Base Scheduling Below Pmin Enhancement

- This initiative aims to enhance the market's flexibility in scheduling startup energy and ensure that the market's internal dispatch operating targets (DOT) reflect actual unit capabilities by:
 - Modifying the Generator Resource Data Template (GRDT) to include separate parameters for hot, warm, and cold startup ramp times.
 - Allowing for base scheduling below Pmin to accurately represent different startup conditions and ensure resources are dispatched efficiently according to their operational capabilities.

Base Scheduling Below Pmin Enhancement

- **Objective 1: Enhancing Operational Capabilities** - This initiative is intended to refine market design to accurately capture startup energy needs, directly enhancing CAISO's capability to integrate resources with varying startup requirements, thus improving operational flexibility.
- **Objective 2: Strengthening Resource Adequacy** - By enabling precise scheduling of units based on their startup type, this initiative supports CAISO's resource adequacy goals. It ensures that all available resources can be effectively utilized, contributing to grid reliability.
- **Objective 3: Expanding Market Opportunities** - Accommodating diverse startup conditions expands market access for a variety of generation resources, particularly combined cycle units, enhancing market depth and operational efficiency.
- **Objective 4: Improving Stakeholder Engagement** - Addressing this technical limitation demonstrates CAISO's commitment to stakeholder feedback and collaborative market enhancements, encouraging a more inclusive and responsive market development process.

Base Scheduling Below Pmin Enhancement

- While not driven by regulatory mandates, the urgency for implementing this initiative stems from the need to align market operations with the practical realities of generating unit startups.
- Delaying its resolution could continue to hinder the efficient integration of resources, particularly those with variable startup times, potentially impacting grid reliability and increasing operational costs.
- Immediate attention is recommended to ensure the operational flexibility needed for efficient grid management, particularly for units that face scheduling challenges under the current GRDT constraints.
- Further, SRP appreciates the CAISO's previous commitment to enable base scheduling below Pmin, however its effectiveness is currently limited for multiple resources due to existing operational constraints.
- This initiative is intended to address these limitations and ensure that the ability to schedule below Pmin is available and fulfill the CAISO's commitment.



California ISO

Accounting for upward transition costs in settlements after economic commitments to lower configurations

Salt River Project (ISO)

[California ISO - All comments \(caiso.com\)](https://www.caiso.com)

Accounting for Upward Transition Costs in Settlements after Economic Commitments to Lower Configurations

- This initiative was submitted by SRP for the 2022 catalog and is being resubmitted for 2023.
- A recent case was identified where a Multi-Stage Generator (MSG) was base scheduled in an upper configuration but was instructed to transition to a lower configuration per economic commitment by the WEIM.
- Due to a long minimum down time/transition time, the Short-Term Unit Commitment (STUC) run did not identify the need to transition back up to the higher configuration shortly after the STUC horizon.

Accounting for Upward Transition Costs in Settlements after Economic Commitments to Lower Configurations

- The unit met its minimum down time, but it did not stay in the lower configuration much longer.
- The transition cost was then not accounted for in the market decision to move back to the upper configuration in a subsequent market run because the unit continued to be base scheduled in the upper configuration.
- It is SRP's understanding that this transition cost is also not accounted for in Bid Cost Recovery (BCR) or other settlements processes, even though it is a direct result of the market decision to transition to the lower configuration.
- One solution might be to keep the transition cost out of the market optimization decision, but later account for it in the BCR process in the event the unit does not recover its cost for following the transition instruction.

Accounting for Upward Transition Costs in Settlements after Economic Commitments to Lower Configurations

- This initiative seeks to ensure fair compensation for transition costs resulting from market instructions by:
 - Introducing a settlement adjustment to account for the costs associated with transitioning between configurations as directed by the market.
 - Modifying the Bid Cost Recovery (BCR) process or similar settlement mechanisms to include transition costs not recovered due to market-optimized commitments to lower configurations.

Accounting for Upward Transition Costs in Settlements after Economic Commitments to Lower Configurations

- **Objective 1: Enhancing Operational Capabilities** - Acknowledging transition costs in settlements enhances market operational integrity by ensuring that costs associated with market-directed actions are accurately accounted for and compensated.
- **Objective 2: Strengthening Resource Adequacy** - This initiative indirectly supports resource adequacy by ensuring that resources are not economically disincentivized from following market instructions, therefore maintaining their availability and operational flexibility.
- **Objective 3: Expanding Market Opportunities** - By addressing settlement discrepancies this initiative promotes fair market participation, ensuring that all operational costs are recognized, thereby encouraging broader participation from diverse resources.
- **Objective 4: Improving Stakeholder Engagement** - This initiative demonstrates a commitment to addressing stakeholder concerns regarding market fairness and transparency, fostering a collaborative environment for continuous market improvement.

Accounting for Upward Transition Costs in Settlements after Economic Commitments to Lower Configurations

- There are no explicit regulatory deadlines for addressing this initiative; however, the timely rectification is critical for maintaining market fairness and participant trust.
- The absence of a solution to this issue may lead to financial disincentives for compliance with market instructions, risking the efficient functioning of the market and potentially leading to reliability concerns over time.
- Immediate consideration is warranted to prevent financial losses for participants adhering to market instructions, ensuring that operational decisions are economical.

For reference

- Visit 2024 process webpage for more information:
- <https://stakeholdercenter.caiso.com/RecurringStakeholderProcesses/Annual-policy-initiatives-roadmap-process-2024>
- 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
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