



California ISO

# External Load Forward Scheduling Rights Process – Issue Paper

Stakeholder Meeting

September 9, 2021

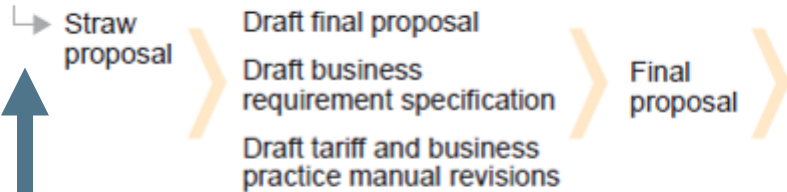
# Agenda

Time	Topic	Presenter
1:00 – 1:05	Welcome and stakeholder process	Kristina Osborne
1:05 – 1:15	Opening remarks	Mark Rothleder
1:15 – 1:50	Initiative overview	Milos Bosanac
1:50 – 2:40	Phase 1 – scope overview	Milos Bosanac
2:40 – 3:30	Phase 2 – scope overview	Milos Bosanac
3:30 – 3:40	EIM Governing Body decisional classification and next steps	Kristina Osborne

# Stakeholder Process

## PROPOSAL DEVELOPMENT

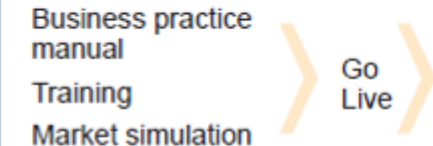
Issue paper and working groups



## DECISION



## IMPLEMENTATION



Stakeholder input

We are here

*This represents the typical process, and often stages of the process run in parallel.*

# Initiative Overview

## Initiative Background

- This initiative builds upon the policy discussions in the *Market Enhancements for Summer 2021 Readiness* initiative concluded earlier in the year.
- Purpose of initiative is to develop a long-term, holistic, framework for establishing scheduling priorities in the market.
- Initiative also intends to evaluate near-term enhancements to the current scheduling priorities that are implementable by summer 2022.

# Current Scheduling Priorities Framework

- The ISO manages schedules on its grid through the DA and RT markets, and applies scheduling priorities to conduct curtailments of self-schedules when the market cannot find a feasible solution.
- If there is sufficient generation and transmission capacity to support these self-schedules, the ISO market will uphold these self-schedules.
- If there is insufficient supply or binding transmission constraints, ISO markets will curtail self-schedules to clear the market based on market penalty parameters that reflect respective scheduling priorities.

# Current Framework – Wheel and Export Priorities

- Wheels can establish high scheduling priority (equal to load) by:
  - Notifying the ISO 45 days prior to the month the MW quantity of the wheel supported by firm supply contract to serve load in external balancing authority area for the month.
  - Attesting that they have secured firm transmission to the ISO border for the entire month.
- Exports can establish high scheduling priority (equal to load) by:
  - Sourcing from designated non-resource adequacy capacity;
  - Confirming a load serving entity outside of ISO has rights to the capacity.

# Initiative will be move forward through two concurrently run phases

- Phase 1
  - Focus on near term enhancements that can be vetted by March 2022 and implemented by summer 2022.
  - Includes transparency enhancements and substantive enhancements to scheduling priorities.
- Phase 2
  - Focus on long-term framework for establishing scheduling priorities in market.
  - CAISO will move toward developing a forward transmission reservation process to establish scheduling priority.
  - Establishing collaborative stakeholder working groups to help further develop structure of a transmission reservation process.



# Phase 1 – Scope Overview

# Phase 1 – Transparency Enhancements

- Stakeholders requested additional data and information transparency to help inform curtailment risk and understand curtailment impacts across transactions.
- Proposed transparency enhancements in scope include:
  - Consolidation of terms and BPM requirements
  - Curtailment data and information
  - Data on transactions at tie points
  - RUC load forecast adjustment data

## Phase 1 – Transparency Enhancements (cont.)

- *Scope item:* Consolidation of terms and BPM requirements associated with exports and wheels through the CAISO system.
  - Review of tariff, BPM, and system guide terms to ensure consistency.
  - Development of addendum that consolidates relevant export and wheeling concepts into a single document, including establishment of priorities.
- Stakeholders noted this would provide a single location or document describing key concepts and facilitating easier contracting.

## Phase 1 – Transparency Enhancements (cont.)

- *Scope item:* Providing curtailment data and information on impacted transactions, including wheels and exports.
  - Providing availability of aggregate curtailment data soon after issuance (real-time), identifying impact on different transactions.
- CAISO currently provides after-the-fact curtailment data and additional information through the monthly *Summer Market Performance Report*.
  - Provides aggregate data, across the month, on wheel and export curtailments.
  - Published only during summer months.

## Phase 1 – Transparency Enhancements (cont.)

- *Scope Item:* Data on transactions at import/export points.
  - Providing data on aggregate RA import showing at tie points and aggregate PT wheel registrations at import/export points.
  - Includes provision of historical aggregate data on RA import showings.
- CAISO currently publishes other data requested by stakeholders, including:
  - Maximum Import Capability (MIC) allocations by tie point;
  - Transmission ownership rights (TOR) and existing transmission contracts (ETC); and
  - Available transfer capability (ATC)/scheduling limits at import/export points.

## Phase 1 – Transparency Enhancements (cont.)

- *Scope Item:* RUC load forecast adjustments.
  - Publication of load forecast adjustments on OASIS, in real-time.
  - CAISO publishes a day-ahead load forecast, but load forecast adjustments in RUC are not published.
- Publication of RUC load forecast adjustments can create additional situational awareness for market participants, particularly those exporting or wheeling through CAISO system.
- CAISO currently publishes information on RUC load forecast adjustments after-the-fact in:
  - *Daily Day-Ahead Summer Report*, and
  - *Monthly Summer Market Performance Report*.

# Phase 1 – Substantive Enhancements

- Stakeholders also suggested a number of enhancements to the current process for establishing high scheduling priority for wheels and exports.
- Proposed transparency enhancements in scope:
  - High priority export status when sum of schedules exceeds non-RA capacity.
  - Mitigating impacts of underproduction of resources supporting PT exports.
  - Minimizing unnecessary over-curtailment.

# Phase 1 – Substantive Enhancements

- *Scope Item:* High priority export status when sum of schedules exceeds non-RA capacity.
  - If sum of high priority export (PT export) self-schedules exceeds the non-RA capacity, all PT export schedules revert to low priority (LPT export) status.
- Potential approaches could include:
  - Providing additional visibility for supporting resource scheduling coordinator of non-RA capacity who communicates with different off-takers.
  - Retention of PT export status for at least a portion of the self-schedule.
    - CAISO wants to avoid being the party determining which self-schedules retain PT export status and for which proportion of the schedule from a supporting resource.



# Phase 1 – Substantive Enhancements

- *Scope Item:* Mitigating impacts of underproduction of resources supporting PT exports.
  - In stressed system conditions, underproduction of resources supporting PT exports adversely affects the CAISO's ability to manage the grid reliably.
  - Deviation from scheduled amount places the burden on the CAISO to make up the difference and support the export schedule.
- Potential considerations include:
  - Requiring attestation of production capability closer to real-time bid submission.
  - Reduction of PT export schedules supported by under-producing resources prior to curtailing CAISO load.

# Phase 1 – Substantive Enhancements

- *Scope Item:* Minimize unnecessary over-curtailment.
  - Stakeholders expressed concern that, when market is not feasible and curtailments to self schedules are needed, CAISO may curtail high priority wheels (PT wheel) along with RA imports without valid e-tags being in place.
  - This may lead to unnecessary curtailments, if the RA import is speculative and does not ultimately flow.
- Potential considerations include:
  - Issue curtailments based upon valid e-tags (involves consideration of timing when e-tags required).
  - Review timing of curtailments.

# Phase 1 – Enhancements Not Included in Scope

- *Development of simplified forward transmission reservation process for establishing scheduling priorities.*
  - Not sufficient time to evaluate key policy components of framework by March 2022, or implement by summer.
- *Multiple supporting resources for single PT export schedule, rounding of export schedules to whole numbers.*
  - High complexity in implementation and not compatible with forward transmission reservation process.
- *Evaluating deliverability of PT exports.*
  - Forward transmission reservation process would provide for ability to evaluate deliverability based on transmission requests.

# Initiative Schedule – Phase 1

<b>Date:</b>	<b>Activity:</b>
Jul 13	Stakeholder workshop
Aug 31	Post issue paper
Sept 9	Stakeholder meeting
Sept 30	Comments deadline - issue paper
Oct 25	Post straw proposal
Nov 1	Stakeholder meeting
Dec 2	Comments deadline - straw proposal
Dec 22	Post draft final proposal
<b>2022</b>	
Jan 4	Stakeholder meeting
Jan 25	Comments deadline
Feb 10	Post final proposal
Feb 17	Stakeholder meeting
Mar 3	Comments deadline - final proposal
Mar 10	EIM GB meeting
Mar 23-24	ISO Board meeting
June 2022	Implementation

# Phase 2 – Scope Overview

## Phase 2 – Proposed Scope

- The CAISO proposes moving forward with development of a forward transmission reservation process for establishing scheduling priorities in the market.
  - Stakeholder comments supported development of a forward transmission reservation process, and some comments suggested design elements.
- To further design the different components of a forward transmission reservation process, the CAISO proposes establishment of collaborative stakeholder working groups.
  - Leverages the expertise of regional partners, builds consensus, and facilitates timely policy development.

# Guiding Principles

- Ensure CAISO ability to reliably serve native load needs while providing non-discriminatory access to the transmission system consistent with open access principles.
- Minimize seams issues between the CAISO organized market and the OATT framework prevalent across west.
- Support reliable load service in the CAISO and across western balancing authority areas.
- Not deter or inhibit competitive trades.
- Ensure CAISO has the tools and processes necessary to manage the grid reliably.
- Maintain the efficiencies of the CAISO market in dispatching resources to serve load and meet market needs.

# Transmission reservation process can bridge seams with the Open Access Transmission Tariff (OATT)

A forward transmission reservation process in the market can help bridge key seams with the OATT:

1. Ability to reserve transmission and secure high scheduling priority across different time horizons.
  - A wheel through the CAISO could secure high scheduling priority across similar horizons and obtain greater certainty, including short-term timeframes.
2. Requests for long-term service can drive studies and potential system upgrades.
  - A long-term request for transmission service could be studied and drive transmission upgrades on CAISO system for parties wanting to secure high scheduling priority.



# Key Components of a Forward Transmission Reservation Process

- Calculating transmission capacity needed for native load and existing commitments.
- Calculating available transfer capability (ATC) utilized to support requests for transmission service.
- Transmission products and timeframes across which transmission service is offered.
- Study process for requests that cannot be accommodated, potentially leading to transmission upgrades.
- Consideration of whether parties reserving transmission service should also be eligible for allocation of congestion revenue rights (CRR).
- Review rate structure based on transmission products offered.

# Collaborative Stakeholder Working Groups

- To help further develop the components of a forward transmission reservation process, the CAISO proposes establishment of stakeholder working groups.
  - Comprised of external and internal stakeholders, and CAISO staff.
- Three proposed working groups at this junction:
  1. *Group 1 – Native load & ATC calculation*
    - Inputs and assumptions for calculation of native load and associated uncertainty.
    - Calculation of ATC across different horizons.
  2. *Group 2 – Products and reservation process*
    - Types of transmission products.
    - Process for requesting service, evaluation process.
  3. *Group 3 – Study process and transmission upgrades*
    - Process for studying long-term requests for service.
    - Process and requirements for pursuing upgrades.

# Benchmarking – Practices of Other ISOs/RTOs

	PJM	MISO	SPP
Transmission Reservation Process	Yes	Yes. Can offer into RT market without reservation (deemed non-firm).	Yes
Priorities	Firm service highest priority, non-firm lower priority.	Firm service highest priority, non-firm lower priority.	Firm service highest priority, non-firm lower priority.
Transmission Products	PTP/NITS, Firm/Non-Firm, long-term to short-term	PTP/NITS, Firm/Non-Firm, long-term to short-term	PTP/NITS, Firm/Non-Firm, long-term to short-term
Native Load/Network Load Calculation	Existing transmission commitment (ETC), based on generation/load assumptions.	ETC, based on generation/load assumptions.	ETC, based on generation/load assumptions.
Transmission Studies and Upgrades	Requests of 5-years or longer studied to determine if upgrades needed.	Requests of 1-year or longer studied to determine if upgrades needed.	Requests of 1-year or longer studied to determine if upgrades needed.
Capacity Benefit Margin (CBM)	Yes	Yes	No

# Phase 2 - Timeline

<b>Date:</b>	<b>Activity:</b>
Dec 22, 2021	Post straw proposal
<b>2022</b>	
Jan 4	Stakeholder meeting
Jan 25	Comments deadline - straw proposal
Feb 24	Post revised straw proposal
March 3	Stakeholder meeting
March 25	Comments deadline
Late Apr	Post 2nd revised straw proposal
Early Mar	Stakeholder meeting
Late Mar	Comments deadline - 2nd revised straw proposal
Mid to late June	3 <sup>rd</sup> revised straw/re-evaluate timelines
<b>2023</b>	
March	EIM GB meeting
March	ISO Board meeting
<b>2024</b>	
Early 2024	Implementation

## EIM Decisional Classification

- The CAISO proposes that the EIM Governing Body have an **Advisory Role** in approval of the External Load Forward Schedule Rights Process initiative, both Phase 1 and Phase 2.
- Stakeholders are encouraged to submit feedback on the EIM classification in written comments.

## Next Steps

- Please submit comments on the issue paper and meeting discussion using the commenting tool linked on the initiative webpage.
  - Comments are due by end of day September 30, 2021.
- If interested in participating in a working group, please email [isostakeholderaffairs@caiso.com](mailto:isostakeholderaffairs@caiso.com).
- Visit initiative webpage for more information: <https://stakeholdercenter.caiso.com/StakeholderInitiatives/External-load-forward-scheduling-rights-process>.
- If you have any questions, please contact Kristina Osborne at [kosborne@caiso.com](mailto:kosborne@caiso.com) or [isostakeholderaffairs@caiso.com](mailto:isostakeholderaffairs@caiso.com).