



California Independent
System Operator Corporation

January 27, 2022

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

**Re: California Independent System Operator Corporation
Docket No. ER22- ____-000**

**Phase 1 of Transmission Service and Market Scheduling Priorities
Initiative – Filing to Maintain Wheeling Through Priorities for an
Additional Two Years and Make Other Clarifying Tariff Changes**

Dear Secretary Bose:

The California Independent System Operator Corporation (CAISO) submits this tariff amendment¹ to implement Phase 1 of its *Transmission Service and Market Scheduling Priorities* initiative. This tariff amendment will: (1) maintain in effect for an additional two years -- until June 1, 2024 -- tariff provisions the Commission approved on an interim basis until June 1, 2022 to establish wheeling through priorities in the day-ahead and real-time market optimization processes and allocate capacity between CAISO load and wheeling through transactions during stressed system conditions;² and (2) revise tariff provisions the Commission approved on a non-interim basis regarding the resources eligible to back high-priority non-recallable exports (*i.e.*, export self-schedules at scheduling points explicitly sourced by non-resource adequacy capacity).³ The CAISO also makes other clarifying and clean-up edits.

¹ The CAISO submits this filing pursuant to Section 205 of the Federal Power Act (FPA), 16 U.S.C. § 824d. Capitalized terms not otherwise defined herein have the meaning set forth in the CAISO tariff, and references to specific sections and appendices are references to sections and appendices in the current CAISO tariff and as revised or proposed in this filing, unless otherwise indicated.

² See *Cal. Indep. Sys. Operator Corp.*, 175 FERC ¶ 61,245, at PP 140-63, 166-67, 177 (June 25 Order), *notice of denial of reh'gs by operation of law and providing for further consideration*, 176 FERC ¶ 62,093 (2021). The June 25 Order accepted, subject to a compliance filing, the tariff amendment the CAISO submitted on April 28, 2021 in Docket No. ER21-1790-000 (April 28 Tariff Amendment).

³ See June 25 Order at PP 43-47.

A Commission order by March 14, 2021 maintaining the interim wheeling-through tariff provisions for the next two years will provide continued certainty regarding the rules for wheeling through the CAISO system, allowing parties in the western United States to undertake supply planning and contracting for the upcoming summer(s), while maintaining the protections those rules provide to CAISO native load. The extension will also enable the CAISO and stakeholders to focus their efforts on developing and implementing by June 1, 2024 a durable long-term approach for entities to reserve available CAISO transmission for wheeling through transactions. This is a significant, complex, and time-consuming undertaking. The CAISO is committed to implementing a long-term framework no later than June 1, 2024, and the policy development process is well underway.

Although some stakeholders would prefer alternative solutions to the interim wheeling through provisions or maintain their original objections to them, stakeholders submitting comments on the CAISO's Draft Final Proposal for Phase 1 of the stakeholder initiative (Phase 1 Draft Final Proposal) generally supported or did not oppose extending the interim wheeling through tariff provisions for an additional two years. The CAISO and stakeholders worked hard to search for possible alternatives to the interim measures for summer 2022 but identified no preferable solutions the CAISO could timely implement. Considering the challenges to reliability that may arise in the West during critical summer months, the continued interim nature of the wheeling through measures, the Commission's previous acceptance of these measures on an interim basis, and the need to focus on developing and implementing long-term measures, the Commission should approve an extension of the interim measures for two more years.⁴

The CAISO also proposes to revise the tariff to ensure a variable energy resource (VER) is capable of supporting a high priority, non-recallable export transaction for the hour in which it has submitted a bid, based on its most recent forecast for that hour. This will reduce the likelihood the CAISO must support such exports transactions using its resource adequacy capacity (RA Capacity). In addition, the CAISO proposes a clarifying tariff revision to reflect the CAISO's intent in the April 28 Filing to require high-priority non-recallable exports to designate an internal resource to support an export transaction. Both of these tariff revisions regarding high priority non-recallable exports are severable from the revisions to extend the interim wheeling through provisions and from each other.

⁴ See *id.* at P 141 (finding that the wheeling through provisions contained in the April 28 Tariff Amendment "will result in a just and reasonable interim solution that will reconcile the needs of both CAISO load and external load"); *id.* at P 142 (finding that it is important to ensure that "CAISO's transmission capacity is allocated in a balanced and fair manner that is not inconsistent with the principles embodied in Order Nos. 888 and 890" and that "CAISO's proposal accomplishes this for the interim period as CAISO develops a more comprehensive solution").

The CAISO respectfully requests that the Commission issue an order within 45 days of this filing, *i.e.*, by March 14, 2022, approving all of the tariff revisions proposed herein. Issuing an order by March 14 is particularly important to provide regulatory certainty for market participants and the CAISO regarding the wheeling through rules for this summer. It will also give market participants sufficient time to make contractual arrangements (and any necessary contract adjustments) for the critical summer 2022 period and register their high-priority wheeling through (*i.e.*, Priority Wheeling Through) transactions with the CAISO by the April 17, 2022 deadline for wheeling through transactions for the month of June.⁵ The wheeling through tariff revisions proposed in this filing, which include some clean-up and clarification revisions, are substantively the same as the tariff revisions the Commission found to be just and reasonable in the June 25 Order. Therefore, issuing an order by March 14, 2022 is appropriate.

The CAISO is submitting two sets of tariff revisions with different effective dates in this filing. The first set consists of all the tariff revisions the CAISO proposes to implement effective June 1, 2022. Because the CAISO intends all the wheeling through-related tariff revisions in this filing to be interim only, the CAISO is also submitting a second set of tariff revisions that removes all such wheeling through provisions (and only those provisions) from the tariff effective June 1, 2024. The CAISO respectfully requests waiver of the Commission's 120-day notice requirement to permit these effective dates for the two sets of tariff revisions.

I. EXECUTIVE SUMMARY

In recent years, tight supply conditions in the western United States have made it challenging to maintain reliable service in the CAISO balancing authority area and neighboring regions. Following rotating electricity outages in August 2020, the CAISO undertook an expedited stakeholder initiative to evaluate market enhancements to prepare for expected stressed system conditions in summer 2021. The stakeholder initiative resulted in the April 28 Tariff Amendment, in which the CAISO proposed certain revised scheduling priorities and market rules for export, load, and wheeling through transactions. The Commission approved the April 28 Tariff Amendment in the June 25 Order.

Under the revised scheduling priorities, which the CAISO implemented in early August 2021, wheeling through transactions must meet specific requirements to secure

⁵ As noted above, April 17, 2022 is the registration deadline for wheeling through transactions that will be conducted starting on June 1, 2022. The CAISO requests that the first set of tariff revisions become effective June 1, not April 17, because the interim wheeling through tariff revisions that are currently in effect will continue to apply until June 1, 2022, and therefore will apply through the April 17 registration deadline.

a scheduling priority equal to CAISO native load. The tariff provisions implementing the wheeling through priorities are interim and will sunset after May 31, 2022 absent further Commission action. The other tariff revisions in the April 28 Tariff Amendment are in effect on a non-interim basis.

In the April 28 Tariff Amendment, the CAISO committed to undertake a new stakeholder initiative to develop and implement a holistic, long-term framework for external entities to obtain firm transmission service for wheeling through schedules on a forward basis. The CAISO commenced the new initiative, now called *Transmission Service and Market Scheduling Priorities*, soon after the Commission issued the June 25 Order.⁶ The initiative has two distinct phases that the CAISO has run simultaneously. Phase 1, which has concluded, focused on possible near-term enhancements to the interim wheeling through priorities framework, in particular enhancements the CAISO could implement by the summer of 2022. Phase 2 is focused on developing a robust, long-term framework -- a transmission service reservation process for establishing wheeling through scheduling priority across the CAISO system. This tariff amendment results from Phase 1 of the initiative.

In Phase 1, the CAISO and stakeholders considered possible alternatives to the interim measures for summer 2022 but identified no preferable solutions the CAISO could implement within that timeframe. Further, the complexities and implementation challenges associated with a new transmission reservation process, along with potential concerns that an abrupt transition to any new framework could affect contracting and summer preparation, precluded substantial changes to the interim wheeling through priorities in the near term. The CAISO and stakeholders thus concluded that the best approach was to extend the existing interim measures for another two years and focus all their efforts on developing and implementing a durable, long-term framework. As such, the CAISO proposes to maintain in effect until June 1, 2024 the same wheeling through tariff provisions the Commission approved in the June 25 Order, with only minor clean-up revisions.⁷

Under the tariff revisions submitted in this filing, the CAISO will continue to have two categories of wheeling through self-schedule transactions – a Priority Wheeling Through and a non-Priority Wheeling Through. Priority Wheeling Through transactions will continue to have a priority equal to CAISO load and high-priority non-recallable exports in in the day-ahead and real-time market optimization processes. Non-Priority

⁶ Materials regarding this stakeholder initiative are available on the *California ISO - Transmission service and market scheduling priorities* page at <https://stakeholdercenter.caiso.com/StakeholderInitiatives/Transmission-service-and-market-scheduling-priorities>. The initiative was previously known as the *External Load Forward Scheduling Rights Process* initiative.

⁷ The CAISO proposes some non-substantive clean-up and clarification revisions to the interim wheeling through tariff provisions.

Wheeling Through transactions will continue to have a lower priority. The CAISO retains the eligibility requirements for Priority Wheeling through status. The CAISO will also continue to perform a process after the hour-ahead scheduling process (HASP) to allocate available transmission capacity *pro rata* between supply needed to meet load within the CAISO balancing authority area and Priority Wheeling Through transactions. The CAISO will continue to perform this post-HASP process only when an intertie is constrained in the import direction by a scheduling limit or Path 26 is constrained in the north-south direction, and HASP cannot meet CAISO Forecast of CAISO Demand or fully accommodate a Priority Wheeling Through transaction.

The Commission should maintain the interim wheeling through tariff provisions through May 31, 2024 for the same reasons it approved them in the June 25 Order. Supply conditions in California and the west remain tight, and external load serving entities (LSEs) are likely at times to rely on the CAISO grid to serve their load. Maintaining the interim wheeling through tariff provisions will provide continued certainty regarding the rules for wheeling through the CAISO system, better enabling wheeling through customers to plan effectively and make contractual arrangements to serve their own load and ensure their own reliability. It will also keep in place the protections those rules provide to CAISO native load.

Maintaining the interim provisions for an additional two years will also give the CAISO and stakeholders the time necessary to develop and implement the long-term transmission reservation framework being considered in Phase 2 of the *Transmission Service and Market Scheduling Priorities* initiative. The long-term framework ultimately developed in Phase 2 will replace the interim wheeling through tariff provisions. The CAISO's goal is to (1) develop a final proposal in Phase 2 by the end of 2022, and (2) submit a tariff amendment in 2023 to be effective by June 1, 2024 at the latest. The design and implementation issues associated with the measures being considered in Phase 2 are complex, and the CAISO and stakeholders need sufficient time to focus their efforts on addressing them.

In this filing, the CAISO also proposes to enhance existing tariff provisions regarding the resources backing high-priority, non-recallable exports by requiring that VERs supporting such exports have sufficient capacity to support the export throughout the entire hour of their bid, based on the resource's most recent forecast for that hour.⁸ Under the current tariff provisions, the scheduling coordinator of the VER supporting resource attests, based on the forecast *at the time of bid submission*, that the resource

⁸ The CAISO also clarifies some tariff language that applies to high priority non-recallable exports, but which inadvertently refers to Priority Wheeling Through transactions. As discussed below, the CAISO is also implementing additional enhancements identified in Phase 1 of the *Transmission Service and Market Scheduling Priorities* stakeholder initiative to provide additional information to scheduling coordinators for high-priority exports and improve transparency by providing additional information to stakeholders. These enhancements do not require amendments to the CAISO tariff.

can produce up to the level of the high-priority export schedule for the hour of the bid. Depending on when the scheduling coordinator for the VER submits the bid – which can be as soon as immediately after the close of the day-ahead market – the resource’s forecasted capabilities for the hour of the bid could differ drastically from the resource’s actual capabilities based on the resource’s latest output forecast before real-time market close. The tariff revision ensures VERs are supporting high-priority non-recallable exports for the hour based on their current forecasted capabilities, not a stale forecast. This tariff change reduces the risk that the CAISO must support high priority non-recallable exports with RA Capacity.

II. BACKGROUND AND NEED FOR THE FILING

A. CAISO Market Scheduling Priorities

The CAISO market processes include both day-ahead and real-time wholesale electricity markets.⁹ Scheduling coordinators can submit economic bids and self-schedules of energy and ancillary services in the CAISO markets, including self-schedules of load, exports, and wheeling through transactions.¹⁰

The CAISO has no transmission reservations to manage the priority of schedules to address system constraints. Instead, the CAISO manages schedules on its grid through the day-ahead and real-time markets and applies scheduling run priorities defined in its tariff to curtail self-schedules (*i.e.*, price-taker bids) in its markets.¹¹ The CAISO markets honor these self-schedules if there is sufficient generation and transmission capacity to support them. If there is insufficient supply or binding transmission constraints, the CAISO markets will curtail self-schedules to clear the

⁹ Existing tariff sections 31, *et seq.* and 34, *et seq.*; tariff appendix A, existing definition of “CAISO Markets Process.” The day-ahead market (DAM) includes the market power mitigation process, the integrated forward market (IFM), and the residual unit commitment (RUC). Existing tariff section 31. In the DAM, energy supply clears against economic demand bids. Existing tariff section 31.3. For the sake of clarity, this transmittal letter distinguishes between existing tariff provisions (*i.e.*, provisions in the current CAISO tariff), retained tariff provisions (*i.e.*, provisions that were added to the tariff in the April 28 Tariff Amendment and the CAISO proposes to retain (in some cases with minor revisions) in this filing), and revised tariff provisions (*i.e.*, existing tariff provisions that the CAISO proposes to revise in this filing). Except as otherwise specified below in this transmittal letter, references to retained tariff sections herein mean tariff sections that will be in effect only from June 1, 2022 through May 31, 2024.

¹⁰ Existing tariff section 30, *et seq.* A self-schedule is a market bid a scheduling coordinator submits to the CAISO that indicates a quantity in megawatt-hours (MWh) but does not specify a price. This indicates the scheduling coordinator is a price-taker. Tariff appendix A, existing definition of “Self-Schedule.” Effectively, self-schedules are requests that the market schedule the transaction irrespective of the market price.

¹¹ The scheduling priorities in the day-ahead market are specified in CAISO tariff section 31.4, and the scheduling priorities for the real-time market are specified in CAISO tariff section 34.12.

market. The market software determines the priority order in which the various self-schedules are curtailed using market parameters known as “penalty prices.”¹² The CAISO sets these penalty prices to specific values to (1) determine the conditions under which the market may relax a constraint and/or curtail a self-schedule; and (2) establish the market prices when these events happen.¹³

Besides self-scheduling load and exports, scheduling coordinators can self-schedule wheeling through transactions through the CAISO system.¹⁴ Wheeling through self-schedules consist of both an import self-schedule and an export self-schedule and can occur between any two intertie points.¹⁵ Scheduling coordinators can also submit wheeling through transactions using economic bids, with both the import and export legs providing economic bids.¹⁶ If there is sufficient supply to support all self-schedules, wheeling through transactions and exports with economic bids compete for the remaining transmission capacity.

In the day-ahead market, the scheduling priority of exports relative to load depends on whether the exporting scheduling coordinator designates a resource with non-RA Capacity as supporting the export.¹⁷ The CAISO uses a validation process to ensure a resource supporting a high-priority non-recallable export is eligible for designation. When a scheduling coordinator submits a high-priority non-recallable export, it provides the self-schedule megawatt (MW) amount and identifies a supporting resource. The CAISO validates the designated resource has sufficient non-RA supply participating in the market to support the export by comparing the resource’s upper economic limit (*i.e.*, the highest operating level in the resource’s energy bid) to the resource’s designated RA Capacity. Any MW quantity exceeding the designated resource’s available non-RA Capacity has a low-priority recallable export priority.

¹² Although self-schedules with the same scheduling priority may have the same penalty prices, they may or may not be curtailed equally due to congestion, loss factors, or for other reasons.

¹³ See existing tariff section 27.4.3 *et seq.*; see *also* business practice manual for market operations, section 6.6.5.

¹⁴ Existing tariff section 30.5.4.

¹⁵ *Id.* Before implementing the April 28 Tariff Amendment, the CAISO tariff did not specify priorities for self-scheduled wheeling through transactions. Instead, based on how the market software applied penalty factors in the business practice manual, self-scheduled wheeling through transactions previously had a higher scheduling priority in the market than both high-priority non-recallable exports (*i.e.*, export self-schedules at scheduling points explicitly sourced by non-RA Capacity) and internal CAISO load. See transmittal letter for April 28 Tariff Amendment at 31.

¹⁶ Existing tariff section 30.5.4.

¹⁷ Existing tariff section 31.4.

B. The April 28 Tariff Amendment

A heat wave affected the western United States for several consecutive days in mid-August 2020, causing energy supply shortages that led to two controlled rotating power outages in the CAISO footprint on August 14 and 15. The CAISO, California Public Utilities Commission (CPUC), and California Energy Commission (CEC) then undertook a root cause analysis of these events, and the CAISO's Department of Market Monitoring (DMM) separately issued a report on CAISO market performance during the events.¹⁸ In the first half of 2021, the CAISO undertook an expedited stakeholder initiative to evaluate market enhancements to prepare for expected stressed system conditions in summer 2021.¹⁹ The April 28 Tariff Amendment arose from those stakeholder efforts.

The CAISO filed the tariff revisions in the April 28 Tariff Amendment to modify load, export, and wheeling through priorities in the day-ahead and real-time market optimization process and establish related market rules. The CAISO pursued the tariff revisions to ensure that, during constrained system conditions, the CAISO can reliably and fairly manage transactions at the interties and internal transmission paths to meet its native load obligations, while continuing to provide access to external entities that also rely on the CAISO grid to serve their load. The CAISO discusses below only the tariff revisions in the April 28 Tariff Amendment relevant to this filing.

To address the potential effects wheeling through transactions might have on the CAISO's ability to meet native load obligations, the CAISO proposed, on an interim basis through May 31, 2022, to establish two categories of wheeling through self-schedule transactions – a Priority Wheeling Through and a non-Priority Wheeling Through.²⁰ As proposed by the CAISO, Priority Wheeling Through transactions would have a priority equal to self-scheduled imports needed to serve CAISO load. Non-Priority Wheeling Through transactions would have a lower priority. The CAISO proposed establishing two categories of wheeling through self-schedules because,

¹⁸ See transmittal letter for April 28 Tariff Amendment at 11-15.

¹⁹ Materials related to this stakeholder initiative are available on the *California ISO - Market enhancements for summer 2021 readiness* page at <https://stakeholdercenter.caiso.com/StakeholderInitiatives/Market-enhancements-for-summer-2021-readiness>.

²⁰ A Priority Wheeling Through transaction is a "Self-Schedule that is part of a Wheeling Through transaction consistent with Section 30.5.4 that is supported by (1) a firm power supply contract to serve an external Load Serving Entity's load throughout the calendar month and (2) monthly firm transmission the external Load Serving Entity has procured under applicable open access tariffs, or comparable transmission tariffs, for Hours Ending 07:00 through 22:00, Monday through Saturday excluding NERC holidays, from the source to a CAISO Scheduling Point." All other Wheeling Through Self-Schedules are non-Priority Wheeling Through transactions."

unlike other independent system operators (ISOs) and regional transmission organizations (RTOs) and other transmission providers, the CAISO lacked any transmission reservation mechanism or express measures to set aside capacity for native load. As part of its wheeling through tariff revisions, the CAISO also proposed to perform a process after the HASP to allocate available transmission capacity *pro rata* between supply needed to meet CAISO load and Priority Wheeling Through transactions if certain transmission constraints arise. The CAISO explained that the wheeling through tariff revisions would enable the CAISO to manage intertie constraints more effectively and balance the interests of market participants to minimize the need to shed load across the west during tight supply conditions.²¹

The CAISO also proposed several new rules and requirements regarding the capacity that can support high-priority non-recallable exports.²² The CAISO intended these bidding and behavioral rules to ensure capacity supporting high-priority non-recallable exports (1) is not otherwise contracted with a CAISO load serving entity (LSE), *i.e.*, the capacity is committed solely to an external LSE, and (2) is available and physically capable of meeting its schedule so capacity procured to serve CAISO native load does not support the export.²³ The CAISO proposed to implement these tariff revisions on a permanent (*i.e.*, non-interim) basis.²⁴ One such rule was that a scheduling coordinator for a designated resource supporting a high-priority recallable export and the scheduling coordinator for the export self-schedule could designate the resource only if the resource is expected to have sufficient available capacity to support the export quantity throughout the entire hour.²⁵ For VERs, this requirement could only be satisfied “if the resource’s forecasted output for each of the four (4) fifteen (15) minute intervals at the time of bid submission is for Generation that is equal to or greater than the Self-Schedule export quantity.”²⁶

The CAISO also explained in the April 28 Filing it had commenced a stakeholder initiative to identify and implement a long-term solution that will enable external entities

²¹ Transmittal letter for April 28 Tariff Amendment at 49-78. The CAISO discusses the tariff provisions on wheeling through transactions in greater detail below in section III.A of this transmittal letter.

²² See existing tariff section 30.5.1.

²³ See transmittal letter for April 28 Tariff Amendment at 34-49. In sections III.B and III.C of this transmittal letter, the CAISO discusses in greater detail the specific tariff provisions regarding capacity that can support high-priority non-recallable exports that are relevant to the clarifications proposed in this filing.

²⁴ Transmittal letter for April 28 Tariff Amendment at 77-78.

²⁵ Existing CAISO tariff section 30.5.1 (aa).

²⁶ *Id.*

to obtain firm transmission for wheeling through schedules on a forward basis.²⁷ The CAISO stated that it aimed to request approval from the CAISO Board of Governors (CAISO Board) of the proposals developed in that stakeholder initiative and to file a tariff amendment to implement the proposals by summer 2022.²⁸ However, the CAISO also stated that

It may be unable to develop and implement any longer-term measures by June 2022. Thus, the possibility exists the CAISO might seek to extend the wheeling through provisions proposed in this filing or seek to implement other interim measures effective June 1, 2022. Any changes would require the CAISO to submit a new Section 205 filing to supersede [the interim wheeling through provisions].²⁹

C. The June 25 Order

In the June 25 Order, the Commission accepted the tariff revisions contained in the April 28 Tariff Amendment effective as of the dates requested by the CAISO, subject to the CAISO submitting a compliance filing within 30 days.³⁰

Regarding the interim tariff revisions on wheeling through priorities, the Commission found the “CAISO’s wheeling through proposal represents a just and reasonable and not unduly discriminatory or preferential prioritization of the use of CAISO’s transmission system.”³¹ The Commission also found the interim wheeling through tariff provisions were consistent with the open access principles in Order Nos. 888 and 890³² and “consistent with the balance described in Order No. 890 between ‘the transmission provider’s need to meet its native load obligations and the need of other entities to obtain service from the transmission provider to meet their own obligations.’”³³ The Commission concluded the wheeling through tariff provisions were

²⁷ *Id.* at 62. The CAISO later explained in its answer to comments and protests regarding the April 28 Tariff Amendment that it would consider a long-term solution in the *External Load Forward Scheduling Rights Process* stakeholder initiative, which is now the *Transmission Service and Market Scheduling Priorities* initiative. See CAISO motion for leave to file answer and answer to comments and protests, Docket No. ER21-1790-000, at 71-72 & n.142 (June 2, 2021).

²⁸ Transmittal letter for April 28 Tariff Amendment at 62.

²⁹ *Id.* at 78.

³⁰ June 25 Order at P 1 and Ordering Paragraphs (A)-(C).

³¹ *Id.* at P 140.

³² *Id.* at PP 143-47.

³³ *Id.* at P 141 (quoting *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 118 FERC ¶ 61,119, at P 107, *order on reh’g*, Order No. 890-A, 121 FERC ¶ 61,297 (2007), *order on reh’g*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh’g*, Order No. 890-C,

justified by tight system conditions and the reliability risks related to allocating scarce transmission capacity on the CAISO system between capacity to serve CAISO load and external load.³⁴

The Commission “agree[d] with commenters, such as the CAISO’s DMM, which recommend the CAISO develop a long-term solution that will clearly delineate rights across CAISO’s transmission system.”³⁵ Nevertheless, the Commission found the “CAISO’s proposal represents a just and reasonable approach,” because “[i]n light of potentially challenging summer conditions across the Western interconnection, it is particularly important that CAISO’s transmission capacity is allocated in a balanced and fair manner that is not inconsistent with the principles embodied in Order Nos. 888 and 890.³⁶ The Commission stated the CAISO’s wheeling through proposal “accomplishes this for the interim period as CAISO develops a more comprehensive solution.”³⁷

The Commission found that penalty pricing parameters that determine the relative scheduling priorities of transactions in the CAISO market optimization software must be specified in the tariff because they affect the conditions of transmission service on the CAISO grid. The Commission directed the CAISO to submit a compliance filing within 30 days of the June 25 Order that “incorporates the penalty pricing parameters associated with the revised scheduling priorities into the relevant sections of the CAISO tariff.”³⁸ The Commission stated it would review the filed penalty pricing parameters under section 205 of the FPA to ensure they are just and reasonable and not unduly discriminatory or preferential.³⁹

Finally, the Commission found the CAISO’s tariff revisions regarding export scheduling priorities were just and reasonable and not unduly discriminatory or

126 FERC ¶ 61,228, *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009)).

³⁴ *Id.* at P 161.

³⁵ *Id.* at P 142.

³⁶ *Id.* See also *id.* at P 177 (reiterating that the wheeling through tariff provisions are an interim solution and encouraging the CAISO to “continue to work with stakeholders to develop a long-term solution that will clearly delineate rights across CAISO’s transmission system”).

³⁷ *Id.* at P 142.

³⁸ *Id.* at PP 166-67.

³⁹ *Id.* at P 167. In response to the June 25 Order, the CAISO timely submitted the required compliance filing on July 26, 2021 (July 26 Compliance Filing), as supplemented on August 4, 2021. The July 26 and August 4 compliance filings are pending before the Commission. Following the provision of five days’ advance notice, the CAISO implemented the second set of tariff revisions contained in the April 28 Tariff Amendment effective August 4, 2021. See CAISO informational filing, Docket No. ER21-1790-000 (Aug. 11, 2021).

preferential.⁴⁰ As relevant to this filing,⁴¹ the Commission accepted the CAISO's "proposed rules and requirements regarding the capacity that can support high-priority non-recallable exports," and found those requirements "will ensure that capacity supporting high-priority non-recallable exports is contracted exclusively to an external load-serving entity, is physically available in real time, and that the capacity is bid into the CAISO markets."⁴²

D. Stakeholder Process for this Tariff Amendment

The CAISO began the *External Load Forward Scheduling Rights Process* initiative, the predecessor to the *Transmission Service and Market Scheduling Priorities* initiative that resulted in this tariff amendment, by hosting a workshop with stakeholders on July 13, 2021. In the workshop, the CAISO explained that the initiative would (1) explore near-term enhancements implementable by the summer of 2022, and (2) build upon the policy discussion that resulted in the April 28 Tariff Amendment, in which in the CAISO committed to undertake an initiative to develop a long-term durable framework for establishing priority scheduling rights in its markets.⁴³

From the outset, the CAISO envisioned the initiative would proceed in two phases: a first phase that would consider enhancements the CAISO could implement by the summer of 2022 and present to the CAISO Board for approval in early 2022; and a second phase in which the CAISO and stakeholders would consider a longer-term, holistic framework for establishing market scheduling priorities that the CAISO could present for CAISO Board approval and implement later.⁴⁴ The CAISO has been conducting Phase 1 and Phase 2 simultaneously.

Key milestones in the stakeholder process for Phase 1 of the initiative included:

- CAISO publication of an issue paper and a draft final proposal regarding Phase 1;
- CAISO development and publication of draft tariff language, and then revised tariff language in response to stakeholder comments, to implement Phase 1;

⁴⁰ June 25 Order at PP 43-47.

⁴¹ See the tariff clarifications proposed in sections III.B and III.C of this transmittal letter.

⁴² June 25 Order at P 45.

⁴³ See CAISO presentation, *External Load Forward Scheduling Rights Process Workshop*, at slide 6 (July 13, 2021), available at [ISOPresentation-ExternalLoadForwardSchedulingRightsProcessWorkshop-Jul13-2021.pdf \(caiso.com\)](https://www.aiso.com/~/media/CAISO/Presentations/2021/07/13/ExternalLoadForwardSchedulingRightsProcessWorkshop-Jul13-2021.pdf).

⁴⁴ *Id.* at slide 12.

- Conference calls with stakeholders to discuss the papers issued by the CAISO and the draft tariff language;
- Opportunities for stakeholders to provide feedback in the conference calls and to submit written comments on the papers and draft tariff language.⁴⁵

In Phase 1 of the stakeholder process, the CAISO and stakeholders worked diligently and engaged in constructive dialogue to identify possible alternatives and improvements to the existing interim provisions. The CAISO and stakeholders recognized, however, that (1) there was no “easy” fix that would maintain the balance struck in the interim provisions or be implemented by summer 2022, and (2) extending the interim measures for an additional two years was an effective approach to provide certainty to market participants pending development of a long-term solution. The CAISO presented the Phase 1 proposal to the CAISO Board and the Energy Imbalance Market (EIM) Governing Body in a special joint session held on January 20, 2022. This approach allowed the CAISO to expedite filing this tariff amendment and seek to provide certainty regarding the rules for wheeling through the CAISO’s system well before the summer of 2022, thus facilitating resource planning and contracting by affected parties in the west. As indicated above, parties must demonstrate their eligibility for June 2022 Priority Wheeling Through service by April 17, 2022. Stakeholders submitting comments on the draft final proposal generally supported or did not oppose a two-year extension of the wheeling through provisions. The CAISO Board approved filing this tariff amendment filing, which the EIM Governing Body supported in its advisory role.⁴⁶

Regarding Phase 2 of the *Transmission Service and Market Scheduling Priorities* initiative, the CAISO established three stakeholder working groups to consider the key components of a long-term transmission reservation process. As described in the CAISO’s August 31, 2021 Issue Paper, the three working groups and their areas of focus are:⁴⁷

⁴⁵ The record for the stakeholder initiative is available at the *California ISO - Transmission service and market scheduling priorities* page at <https://stakeholdercenter.caiso.com/StakeholderInitiatives/Transmission-service-and-market-scheduling-priorities>. The CAISO provides the Phase 1 Draft Final Proposal, *entitled Transmission Service and Market Scheduling Priorities – Phase 1*, in Attachment E to this filing. The Phase 1 Draft Final Proposal is also available on the website for the stakeholder initiative at <http://www.caiso.com/InitiativeDocuments/DraftFinalProposal-TransmissionService-MarketSchedulingPriorities.pdf>.

⁴⁶ Materials related to the Board’s authorization are available at <http://www.caiso.com/informed/Pages/BoardCommittees/BoardGovernorsMeetings.aspx>. The materials include a presentation and related memorandum provided by CAISO Management to the CAISO Board, which the CAISO also provides in Attachment F to this filing.

⁴⁷ The Issue Paper, which is entitled *External Load Forward Scheduling Rights Process Initiative*, is

Working Group 1 – Calculating Native Load Needs and Available Transfer Capability (ATC)

This working group evaluates approaches, processes, and inputs for calculating native load needs as an existing transmission commitment (ETC) and the overall calculation of ATC. The scope of the work includes:

- Calculating ETC for native load – inputs and assumptions;
- Calculating margins, including Capacity Benefit Margin;
- Accounting for uncertainties (generation, load, topology uncertainties);
- Calculating ATC across different timeframes;
- Transparency and data requirements; and
- Tools and system supporting the calculations and process.

This working group focuses on (1) discussing (and learning from) other entities' practices for calculating the different components of the ATC methodology and reserving transmission capacity for native load needs, and (2) identifying and developing an approach (or approaches) for consideration.

Working Group 2 – Transmission Products and Reserving Transmission Service

This working group focuses on evaluating the different transmission products that could be offered in the CAISO's markets and the process for reserving transmission service. Scope includes:

- Evaluating types of transmission products;
- Evaluating transmission product time increments;
- Evaluating process for requesting transmission service;
- Process for evaluating transmission service requests to determine if these can be awarded;
- Transparency and data requirements regarding awarding of transmission service; and
- Tools and systems supporting the different aspects of processes.

available on the website for the stakeholder initiative at <http://www.caiso.com/InitiativeDocuments/IssuePaper-ExternalLoadForwardSchedulingRightsProcess.pdf>. Information regarding the three working groups is provided at pages 26-28 of the Issue Paper.

Working Group 3 – Studying Requests for Long-Term Service and Identifying Upgrades

This working group focuses on evaluating planning processes the CAISO can integrate into its existing transmission planning process to study requests for long-term transmission service the CAISO cannot otherwise accommodate. The scope of the work includes:

- Process for requesting a study;
- Study process to evaluate whether an upgrade may be needed to accommodate a request, including consideration of individual studies or clustered studies (multiple requests);
- Process and requirements (financial or otherwise) for proceeding with a transmission upgrade; and
- Identifying the rights that an individual entity secures if it proceeds with an upgrade.

In 2021, the CAISO held five Working Group 1 meetings. The CAISO commenced meetings for Working Groups 2 and 3 in January 2022. The working group meetings are open to all stakeholders. The CAISO also met with representatives of other ISOs and RTOs to benchmark their practices regarding market scheduling priorities, treatment of wheeling through and export transactions, calculation of native load needs, and related matters. The CAISO summarized its findings in the Issue Paper.⁴⁸

In its Phase 1 Draft Final Proposal, the CAISO also discussed the status of the Phase 2 effort and considerations for developing a transmission reservation process.⁴⁹ The CAISO reconfirmed the three key components of a transmission reservation framework:

- *Calculation of Available Transfer Capability* – Deriving the transmission capacity available for reservation requires consideration of the transmission capacity needed to serve native load, and other existing commitments, as well as associated margins for which transmission capacity can be set aside to maintain system reliability before deriving ATC.
- *Transmission product(s) and reservation timeframes* – The CAISO and stakeholders must identify the transmission product(s) that can be offered

⁴⁸ Issue Paper at 28-33.

⁴⁹ Phase 1 Draft Final Proposal at 23-29.

across the CAISO system and across different timeframes to minimize seams issues between the CAISO tariff and the OATT frameworks of other western transmission providers.

- *Study process and transmission service requests driving transmission upgrades* – The CAISO and stakeholders must identify a process under which parties seeking to secure transmission service to establish a high market scheduling priority on a long-term basis, to the extent there is insufficient ATC, can request studies to identify needed system upgrades and can drive those system upgrades.⁵⁰

The CAISO discussed each these components of a long-term framework further in the Phase 1 Draft Final Proposal.⁵¹ The CAISO also noted there are other elements to consider including, *inter alia*, rate structure (depending on the framework and transmission products offered), and whether parties reserving transmission service also are eligible for Congestion Revenue Rights allocations.

In addition, the CAISO also noted in the Phase 1 Draft Final Proposal it was actively seeking to engage a consultant to help it evaluate implementation needs and facilitate development of a transmission reservation process.⁵² At the December 20, 2021 stakeholder meeting, the CAISO indicated that its goal is to complete the Phase 2 policy development process and present a Phase 2 proposal to the CAISO Board and EIM Governing Board by the end of 2022.

50 *Id.* at 25.

51 *Id.* at 30.

52 *Id.* at 29.

III. PROPOSED TARIFF REVISIONS ⁵³

A. The Commission Should Allow the CAISO to Maintain the Effectiveness of the Wheeling Through Tariff Provisions for Another Two Years

1. The Tariff Provisions the CAISO Proposes to Maintain Through May 31, 2024

The CAISO proposes to maintain the interim wheeling through scheduling priorities and related tariff provisions approved in the June 25 Order for an additional two years -- until June 1, 2024. Specifically, the CAISO will maintain the wheeling through scheduling priorities by continuing in effect: (1) certain wheeling through-related tariff provisions identical to provisions the Commission accepted in the June 25 Order;⁵⁴ (2) certain wheeling through tariff provisions identical to provisions pending before the Commission in the July 26 Compliance Filing to comply with directives in the June 25 Order;⁵⁵ and (3) certain wheeling through tariff provisions primarily the same as provisions the Commission accepted in the June 25 Order or pending before the

⁵³ In addition to the tariff revisions proposed in this filing, the CAISO will make the following non-tariff enhancements to facilitate the self-scheduling of high-priority non-recallable exports: (1) enhancements to the Scheduling Infrastructure Business Rules (SIBR) system that allow a scheduling coordinator for a designated supporting resource to view the instantaneous non-RA capacity of the resource; and (2) enhancements to the SIBR system to provide scheduling coordinators submitting high priority non-recallable export schedules with a notification warning when they submit export schedules that exceed the non-RA capacity of the supporting resource. Phase 1 Draft Final Proposal at 13-15. Also, the CAISO has already made, or will make, several other enhancements suggested by stakeholders to improve transparency. These enhancements include: (1) sharing aggregate data on registrations of priority wheeling through transactions across the system; (2) providing data on RA imports shown at different tie points based on monthly RA plans; (3) publishing operator-adjusted load forecasts utilized in the residual unit commitment process; (4) publishing curtailment data and information on wheeling through transactions, exports, and load on the Open Access Same-Time Information System (OASIS), promptly after the CAISO issues those curtailments; (5) developing a guide document that consolidates export and wheeling through business practice requirements into an addendum to a business practice manual; and (6) publishing a one-page sheet that identifies relevant existing reports and transparency additions, along with their location. *Id.* at 20-21. None of the enhancements listed in this footnote require any tariff revisions.

⁵⁴ Retained tariff section 31.5.5 and tariff Appendix A, retained definition of "Priority Wheeling Through," as proposed in this filing. These tariff provisions are identical to the same tariff revisions proposed in Attachments B and D to the April 28 Tariff Amendment and accepted in the June 25 Order.

⁵⁵ Revised tariff sections 31.4 and 34.12.2 as proposed in this filing. The revisions to these tariff sections regarding wheeling throughs are identical to the revisions regarding wheeling throughs proposed to the same tariff sections as shown in Attachment B to the July 26 Compliance Filing. For the Commission's eTariff purposes, the revisions contained in this filing are a later version of, and therefore will supersede upon Commission acceptance of this filing, the revisions contained in the July 26 Compliance Filing.

Commission in the July 26 Compliance Filing, except for minor clean-up or clarifying revisions proposed in this filing.⁵⁶ The CAISO describes below the specific tariff provisions it proposes to maintain from June 1, 2022 through May 31, 2024.

The CAISO proposes to maintain in Appendix A to its tariff the definition of a “Priority Wheeling Through,” which means a wheeling through self-schedule that meets three specified criteria.⁵⁷ The Commission found these criteria were appropriate proxies for determining whether external LSEs are relying on the CAISO grid in a manner comparable to CAISO internal load.⁵⁸

First, a firm power supply contract to serve the load of an external LSE for the entire calendar month must support the Priority Wheeling Through transaction.⁵⁹ This criterion is analogous to the existing requirement that scheduling coordinators for CAISO LSEs must procure a specified amount of RA Capacity to meet their monthly RA obligation and show it to the CAISO in a monthly Resource Adequacy Plan.⁶⁰

Second, monthly firm transmission from the source to the CAISO boundary, for Hours Ending 07:00 through 22:00, Monday through Saturday, excluding North American Electric Reliability Corporation (NERC) holidays, must support the Priority Wheeling Through transaction.⁶¹ The specified hours for which the external LSE must procure monthly firm transmission are the peak demand hours as defined by the North American Energy Standards Board (NAESB).⁶²

⁵⁶ Compare retained tariff section 30.5.1(z) as proposed in this filing, with new tariff section 30.5.1(z) contained in Attachment B to the April 28 Tariff Amendment; compare revised tariff section 34.12.1 as proposed in this filing, with revised tariff section 34.12.1 contained in Attachment B to July 26 Compliance Filing; compare retained tariff section 34.12.3 as proposed in this filing, with new tariff section 34.12.3 contained in Attachment D to the April 28 Tariff Amendment. The CAISO discusses each of the minor revisions to these tariff sections below.

⁵⁷ Effective June 1, 2024, the tariff will no longer include this defined term or the related wheeling through tariff provisions.

⁵⁸ June 25 Order at P 141.

⁵⁹ Tariff Appendix A, retained definition of “Priority Wheeling Through” contained in this filing.

⁶⁰ See existing tariff section 40.2.2.4.

⁶¹ Tariff appendix A, retained definition of “Priority Wheeling Through” contained in this filing. The firm transmission hours generally align with the concept of “heavy load hours” in the Western Interconnection. See, e.g., <https://www.ppcpdx.org/industry-info/glossary/> <https://www.bpa.gov/Finance/RateCases/InactiveRateCases/BP12/Final%20Proposal/BP-12-FS-BPA-03.pdf>. The proposal also tracks the CAISO definition of peak-period CRRs. Attachment A to business practice manual for CRRs (which includes a link to the NAESB Business Practices).

⁶² See Additional Off-Peak Days at https://www.nerc.com/comm/OC/RS%20Agendas%20Highlights%20and%20Minutes%20DL/Additional_Off-peak_Days.pdf and the link to the NAESB document therein. In response to the query of one

The monthly firm transmission requirement retained in this filing signals the intention of a Primary Wheeling Through customer to utilize the CAISO transmission system to serve its load just like a CAISO LSE. It recognizes external LSEs have reasonably invested to rely on the CAISO system to serve their native load. Their procuring firm transmission suggests they are committed to, and depend on, using the CAISO system to serve their native load regularly. A monthly firm transmission requirement serves as a reasonable proxy for an external entity to demonstrate that it plans to serve load in a manner comparable to CAISO LSEs.⁶³

The third criterion for a Priority Wheeling Through transaction is that the scheduling coordinator must confirm it meets the two criteria above and notify the CAISO of the power supply contract MW supporting the export self-schedule of the Priority Wheeling Through transaction, 45 days before the month in which the Priority Wheeling Through will start.⁶⁴ The CAISO proposes minor clean-up tariff revisions to eliminate outdated language in the April 28 Tariff Amendment regarding the initial implementation of the Priority Wheeling Through provisions. The timing provision in the April 28 Tariff Amendment states that “[t]he Scheduling Coordinator must provide such information to the CAISO (1) by June 29, 2021 for the months of July and August 2021, and (2) by 45 days prior to the applicable month for all months thereafter.”⁶⁵ Now that July and August 2021 have passed, the CAISO proposes to update this provision to state simply that “[t]he Scheduling Coordinator must provide such information to the CAISO by 45 days prior to the applicable month.”⁶⁶ This 45-day requirement is analogous to the existing obligation on CAISO LSEs under the RA program to provide a monthly Resource Adequacy Plan to the CAISO at least 45 days before the start of the month.⁶⁷

Any wheeling through self-schedule not satisfying the three criteria listed above will continue to be a non-Priority Wheeling Through transaction. Thus, for the continued interim effectiveness of these tariff revisions, there will be two types of wheeling through self-schedules: Priority Wheeling Through transactions, which have a higher scheduling

stakeholder in its comments on the Phase 1 Draft Final Proposal, the CAISO clarifies that a firm transmission contract that includes Sundays and/or holidays, in addition to Monday through Saturday, meets the eligibility requirements for a Priority Wheeling Through.

⁶³ June 25 Order at P 149.

⁶⁴ Retained tariff section 30.5.1(z) contained in this filing. Effective June 1, 2024, the tariff will no longer include this section.

⁶⁵ New tariff section 30.5.1(z) contained in Attachment B to the April 28 Tariff Amendment.

⁶⁶ Retained tariff section 30.5.1(z) contained in this filing.

⁶⁷ See existing tariff sections 40.2.1(a), 40.2.2.4(b), 40.4.7.1(b), and 40.10.5.2(c)(3).

priority equal to CAISO load, scheduling and non-Priority Wheeling Through transactions, which have a lower priority.

Effective through May 31, 2024, the CAISO proposes to retain these higher and lower scheduling priorities in tariff section 31.4 (for the integrated forward market) and tariff section 34.12 (for the real-time market). Specifically, to effectuate this priority scheme in the IFM, the export leg of a Priority Wheeling Through transaction will continue to have a scheduling priority equal to the scheduling priority of a self-schedule of CAISO demand and high-priority non-recallable exports⁶⁸ with lower scheduling priorities assigned to the export leg of a non-Priority Wheeling Through transaction.⁶⁹ Similarly, the import leg of a Priority Wheeling Through transaction will continue to have higher priority⁷⁰ than the import leg of a non-Priority Wheeling Through transaction.⁷¹

To allow the CAISO to continue to provide Priority Wheeling Through transactions the same priority as self-scheduled CAISO load in the real-time market optimization through May 31, 2024, the export leg of a Priority Wheeling Through will have a scheduling priority equal to self-schedules of CAISO Demand in the IFM and a scheduling priority equal to meeting the CAISO load forecast in the RUC process and real-time market.⁷² The export leg of a Priority Wheeling Through will also have the same scheduling priority as a high-priority non-recallable export. The import leg of a Priority Wheeling Through will have a scheduling priority equal to self-scheduled imports. The combined effect of the scheduling priorities of the export and import legs will continue to give Priority Wheeling Through transactions an equal priority in the market to a self-scheduled import needed to meet CAISO load. The CAISO will continue to set the import leg of a non-Priority Wheeling Through transaction to \$0 through May 31, 2024.⁷³

⁶⁸ Retained tariff section 31.4 (at fifth row of table provided therein) contained in this filing.

⁶⁹ Retained tariff section 31.4 (at sixth row of table provided therein) contained in this filing. Similarly, the lower scheduling priorities in the RUC process and real-time market for RUC schedules that are the export self-schedules of non-Priority Wheeling Throughs and for real-time market self-schedules that are the export self-schedules of a non-Priority Wheeling Through are set forth in revised tariff section 34.12.1 (at the second and third rows of the table provided therein) contained in this filing.

⁷⁰ Retained tariff section 31.4 (at eighth row of table provided therein) contained in this filing.

⁷¹ Retained tariff section 31.4 (at ninth row of table provided therein) contained in this filing.

⁷² Retained tariff section 34.12.1 (at first row of table provided therein) contained in this filing.

⁷³ The lower scheduling priority in the RUC process and real-time market for import self-schedules of a non-Priority Wheeling Through is set forth in revised tariff section 34.12.2 (at the ninth row of the table provided therein) contained in this filing.

These tariff revisions continue to ensure, until June 1, 2024, that the highest-priority wheeling through self-schedules have the same priority as CAISO load. Under these tariff revisions, transactions serving CAISO load and wheeling through customers that depend on using the CAISO grid regularly to meet their resource adequacy obligations will have a scheduling priority in the day-ahead and real-time markets higher than non-Priority Wheeling Through customers.

Finally, the CAISO proposes to retain the post-HASP process approved in the June 25 Order through May 31, 2024 (*i.e.*, while Priority Wheeling Through transactions are in effect).⁷⁴ Under the post-HASP process, if an intertie scheduling point is constrained in the import direction or Path 26 is congested in the north-south direction, and the HASP cannot meet CAISO forecast demand or fully accommodate a Priority Wheeling Through transaction, the CAISO will perform the post-HASP process to allocate available transmission capacity between supply needed to meet load within the CAISO balancing authority area and Priority Wheeling Through transactions *pro rata*. Under the tariff provisions proposed to remain in effect through May 31, 2024, the share of load within the CAISO balancing authority area is the lower of each applicable RA resource's real-time energy bid quantity or its shown RA Capacity. The Priority Wheeling Through *pro rata* share for each self-schedule will be based on the lowest of: (1) 110 percent of the submitted day-ahead market self-schedule of the Priority Wheeling Through transaction,⁷⁵ (2) the submitted real-time market self-schedule of the Priority Wheeling Through transaction, or (3) the Priority Wheeling Through quantity requested 45 days before the start of the month. The available transmission capacity the CAISO awards to Priority Wheeling Through transactions in the post-HASP process cannot exceed the Priority Wheeling Through quantity the CAISO calculates in this *pro rata* allocation. If RUC cannot schedule sufficient capacity to meet the RUC Procurement Target, the CAISO will issue a RUC Award or RUC Schedule to imports providing RA Capacity for the full amount of their RA Capacity.⁷⁶

The post-HASP process ensures a proportionate allocation of capacity between Priority Wheeling Through transactions and supply needed to serve CAISO load

⁷⁴ Retained tariff section 31.12.3. Existing tariff section 34.12.2 states that the dispatch priorities “as defined in the RTM [real-time market] optimization may be superseded by operator actions and procedures as necessary to ensure reliable operations.”

⁷⁵ This provision incentivizes Priority Wheeling Through transactions to participate in the day-ahead market. Priority Wheeling Through transactions scheduling only in the real-time market can create reliability issues because they displace at the last minute import supply RUC determines is needed to meet CAISO reliability needs.

⁷⁶ Retained tariff section 31.5.5 with revisions contained in this filing. This ensures CAISO load receives an appropriate share of the transmission capability to meet load-serving obligations if the HASP is infeasible by creating a real-time must-offer obligation for RA imports that did not clear the RUC optimization.

because the market solution using penalty prices may not always produce such an allocation.⁷⁷ Further, it ensures that limited transmission capacity during stressed conditions is allocated first to CAISO native load and Priority Wheeling Through customers who have shown their dependence on the CAISO grid ahead of time based on their investments to secure capacity and supply to serve their load rather than to non-Priority Wheeling Through transactions, which indicate no commitment to, or dependence on, using the CAISO grid routinely on a monthly basis. The allocation process also reduces potential adverse effects on system reliability by ensuring non-Priority Wheeling Through transactions do not prevent RA Capacity north of Path 26 from serving CAISO load south of Path 26.

The currently effective version of the tariff provisions setting forth the post-HASP allocation process refers to “CAISO Load” rather than “Load within the CAISO Balancing Authority Area.”⁷⁸ In the stakeholder process for this tariff amendment, a stakeholder suggested revising the tariff language to state the latter instead of the former, because Appendix A to the tariff does not include a defined term for “CAISO Load.”⁷⁹ The CAISO agreed this change provides greater clarity and thus includes it in the version of the post-HASP process reflected in this filing.⁸⁰

2. The Commission Should Maintain the Previously Approved Interim Wheeling Through Tariff Provisions Through May 31, 2024

The Commission should approve the CAISO’s tariff revisions to maintain the interim wheeling through tariff provisions through May 31, 2024. Maintaining these tariff provisions will enable parties wheeling through the CAISO to establish a scheduling priority equal to CAISO load (*i.e.*, Priority Wheeling Through) by registering a wheeling through transaction at least 45 days before the month and meeting the associated requirements. Wheeling through transactions that are not registered at least 45 days ahead of the month will continue to be considered non-Priority Wheeling Through transactions and will have a scheduling priority lower than Priority Wheeling Through transactions.

In approving the interim wheeling through tariff provisions, the Commission recognized that “in light of potentially challenging summer conditions across the western

⁷⁷ See transmittal letter for April 28 Filing at 67-68.

⁷⁸ See existing tariff section 34.12.3.

⁷⁹ Existing Appendix A to the tariff defines the term “CAISO,” and defines the term “Load,” but there is no defined term called “CAISO Load.”

⁸⁰ Retained tariff section 34.12.3 contained in this filing.

interconnection, it is particularly important that the CAISO's transmission capacity is allocated in a balanced and fair manner that is not inconsistent with the principles embodied in Order Nos 888 and 890."⁸¹ The Commission also found that the interim wheeling through provisions would "clarify CAISO's scheduling priorities heading into a challenging summer season and allocate scarce transmission capacity to those who have demonstrated the greatest reliance on that capacity for serving load." The CAISO expects tight supply conditions to persist in California and the western United States for the next several years.⁸² Further, the CAISO expects some external entities will continue to rely on wheeling through the CAISO system to serve their load. Under these circumstances, maintaining the interim wheeling through tariff provisions through May 31, 2024 is appropriate and necessary for the same reasons the Commission approved them for summer 2022.⁸³ It will keep in place the protections the interim rules provide to CAISO native load.

Maintaining the interim wheeling through provisions until June 1, 2024 balances the need to provide certainty regarding the rules for wheeling through the CAISO system with the need for continued native load protections while the CAISO and stakeholders work to develop a long-term solution. Although, the CAISO and stakeholders examined potential modifications to the existing interim provisions as part of the *Transmission Service and Market Scheduling Priorities* initiative, the CAISO concluded it could not develop and implement either a comprehensive long-term framework or workable, alternative, short-term measures by summer 2022. Further, discussions regarding potential short-term measures were diverting CAISO and stakeholder efforts from developing the long-term approach, potentially delaying it. After discussions with stakeholders, the CAISO concluded the best approach was to extend the existing interim measures for another two years and focus all efforts on developing a more durable, long-term framework.

Stakeholders largely support or do not oppose extending the interim wheeling through tariff provisions through May 31, 2024. Although some stakeholders would prefer modifications to the interim provisions or maintain their original objections to them, there is general stakeholder consensus that extending the existing provisions is desirable because it will allow the CAISO and stakeholders to focus their efforts on the long-term approach, while providing certainty regarding the rules for wheeling through transactions in the meantime.

⁸¹ June 25 Order at P 142.

⁸² See NERC's *2021 Long-Term Reliability Assessment*, at 5,8 (Dec. 2021) available at https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_2021.pdf; Western Electricity Coordinating Council, *2021 Western Assessment of Resource Adequacy*, available at <https://www.wecc.org/Administrative/WARA%202021.pdf>

⁸³ See the CAISO's transmittal letter for the April 28 Tariff Amendment at 49-62.

Entities outside the CAISO balancing authority area have emphasized to the CAISO the importance of certainty in advance of the summer regarding the rules that will be in place so they can effectively plan and make contractual arrangements (or adjust existing contracts) to serve their load and ensure their own reliability. For example, in its comments on the Phase 1 Draft Final Proposal, NV Energy stated that “[m]oving ahead with the continuation of the priority wheeling approach with a FERC filing immediately would give EIM Entities, especially those in the Desert Southwest, certainty as to the rules governing the qualifications for obtaining priority wheeling service as soon as possible.”⁸⁴ Maintaining the tariff provisions for another two years will provide certainty regarding the rules and requirements for wheeling through the CAISO system. This will minimize disruptions to energy procurement planning and contracting activities.

Stakeholders also emphasized the need to develop a long-term transmission reservation framework that would provide an opportunity for wheeling through customers to reserve transmission capacity in advance. Maintaining the wheeling through tariff provisions for two more years will allow the CAISO and stakeholders to focus their efforts on developing such a long-term transmission reservation process for establishing market scheduling priorities in Phase 2 of the *Transmission Service and Market Scheduling Priorities* initiative. The long-term framework developed in Phase 2 will replace the interim wheeling through tariff provisions. Additional time is necessary to develop and implement a new reservation process and to address the challenges of transitioning to a new framework. This is a complex undertaking that will require significant and protracted work by the CAISO and all stakeholders. The CAISO must develop, and the Commission must approve, the Phase 2 proposal well before its implementation date so market participants affected by the proposal will have the certainty of the Commission’s approval and sufficient time to adjust their contracting appropriately. Sufficient time is required to develop, properly test, and implement the systems, software, and processes to accommodate a transmission reservation framework. The CAISO is taking necessary steps to develop a final proposal in Phase 2 by the end of 2022 and submit a tariff amendment in 2023, to be effective by June 1, 2024 at the latest.⁸⁵ The CAISO anticipates needing to provide some lead time for parties to migrate to the new reservation process for wheeling through transactions and to adjust their contracting practices. Depending on the framework ultimately designed and implemented, the CAISO will factor in a “runway” period for the reservation process even if it completes the policy by early 2023.

⁸⁴ NV Energy Comments on the Phase 1 Draft Final Proposal, Jan. 7, 2021.

⁸⁵ If for some reason the CAISO cannot develop and implement a final proposal in that timeframe, the CAISO may seek to extend the wheeling through tariff provisions beyond May 31, 2024, or it may seek to implement other interim measures effective after that date pursuant to a new tariff amendment submitted for that purpose.

The Commission previously has accepted (and extended) CAISO revisions on an interim basis to address system reliability concerns while the CAISO was considering longer-term solutions. For example, in 2016, the Commission accepted the CAISO's filing of "revisions to its tariff to address limitations in the natural gas delivery system in southern California that could adversely impact the reliability of CAISO's electric grid and market operations" for the summer of 2016.⁸⁶ The Commission explained it was accepting the tariff revisions "based on the unique set of circumstances CAISO w[ould] face th[at] summer due to the limited operability of the Aliso Canyon natural gas storage facility in southern California."⁸⁷ The Commission allowed the CAISO to implement the tariff revisions on an interim basis, with an express sunset date, subject to the requirement the CAISO seek Commission authorization to extend their effectiveness.⁸⁸ Subsequently, the Commission issued a succession of orders finding it was just and reasonable to extend, for specified periods that amounted to approximately three-and-a-half years until December 31, 2019, the interim effectiveness of tariff revisions to address the limited operability of the Aliso Canyon facility.⁸⁹ The Commission has also accepted tariff revisions to address system reliability concerns on an interim basis in other proceedings.⁹⁰ For similar reasons, the Commission should permit the CAISO to

⁸⁶ *Cal. Indep. Sys. Operator Corp.*, 155 FERC ¶¶ 61,224, at P 1 (2016).

⁸⁷ *Id.* at P 2.

⁸⁸ *Id.* at P 13.

⁸⁹ *Cal. Indep. Sys. Operator Corp.*, 157 FERC ¶¶ 61,151, at P 26 (2016) ("We find that maintaining in effect the measures accepted on an interim basis in the June 1 Order for an additional year is a just and reasonable approach to addressing the ongoing risks posed by the limited operability of [the] Aliso Canyon [natural gas storage facility]"); *Cal. Indep. Sys. Operator Corp.*, 161 FERC ¶¶ 61,232, at P 26 (2017) ("We find that maintaining the measures accepted on an interim basis in the [order cited immediately above] for an additional year is a just and reasonable approach to addressing the ongoing risks posed by the limited operability of Aliso Canyon"); *Cal. Indep. Sys. Operator Corp.*, Commission Letter Order, Docket No. ER18-375-000 (Dec. 15, 2017) (accepting for filing CAISO tariff amendment "to implement, on an interim basis, previously accepted tariff provisions that expired on November 30, 2017 which related to the limited operability of the Aliso Canyon natural gas storage facility"); *Cal. Indep. Sys. Operator Corp.*, 165 FERC ¶¶ 61,161, at P 15 (2018) (extending temporarily, until December 31, 2019, six tariff provisions "to ensure that CAISO can continue to manage its system reliably when faced with gas constraints posed by the limited operability of Aliso Canyon and known outages on the Southern California gas pipeline system").

⁹⁰ *See, e.g., ISO New Eng. Inc., et al.*, 144 FERC ¶¶ 61,204, at P 42 (2013) (stating that "given the importance of ensuring reliability in New England this coming winter . . . we accept the [proposed Winter Reliability] Program for the limited period requested," subject to "consider[ation of] market-based solutions" in future stakeholder process); *ISO New Eng. Inc.*, 171 FERC ¶¶ 61,235, at PP 1, 57 (2020) (finding that implementation of proposed tariff revisions on an interim basis for winter months over upcoming two-year period "is a reasonable short-term solution to compensating in a technology-neutral manner resources that provide fuel security").

maintain the wheeling through tariff provisions accepted in the June 25 Order for another two years.

In summary, maintaining the interim wheeling through tariff provisions (with the limited modifications described herein) in effect through May 31, 2024 will allow the CAISO to continue to “reconcile the needs of both CAISO load and external load” and provide “a transparent process whereby external load serving entities can make use of CAISO’s transmission on par with CAISO load serving entities”⁹¹ while the CAISO works with stakeholders in Phase 2 of the stakeholder initiative to “develop a long-term solution that will clearly delineate rights across CAISO’s transmission system.”⁹² Extending these provisions will provide market participants with certainty regarding the rules for scheduling wheeling through transactions, while the CAISO works with stakeholders to develop a long term approach for entities to reserve available CAISO transmission capacity for wheeling through transactions. At the same time, the interim wheeling through tariff provisions will continue to provide important protections for native load compared with the framework that existed before the April 28 Tariff Amendment became effective.

B. The Commission Should Accept Revisions to the Requirements for Variable Energy Resources Designated to Support a High-Priority Non-Recallable Export

Under the April 28 Tariff Amendment, the CAISO implemented tariff revisions requiring it to notify the scheduling coordinator for a resource hourly, to the extent practicable, that another entity has designated the resource to support a high-priority non-recallable export. Following such notice, the scheduling coordinator for the designated resource and the scheduling coordinator for the export must ensure the resource designated to support such an export self-schedule has sufficient available capacity to support the export quantity throughout the entire hour.⁹³

As relevant to this filing, the tariff provisions also state that VERs with capacity not contracted by a CAISO LSE can meet this requirement only if, at the time of bid submission, their forecasted quantity for each of the four 15-minute intervals within the hour is for generation equal to or greater than the self-schedule export quantity.⁹⁴ The CAISO proposes to modify this tariff provision as described below.

⁹¹ June 25 Order at P 141.

⁹² *Id.* at PP 142, 177.

⁹³ Transmittal letter for April 28 Tariff Amendment at 35-45; new tariff section 30.5.1(aa) contained in the April 28 Tariff Amendment.

⁹⁴ Transmittal letter for April 28 Tariff Amendment 40-41; new tariff section 30.5.1(aa) contained in the April 28 Tariff Amendment. For example, assume the following forecast for the four 15-minute intervals within an hour: 50 MW for interval 1, 45 MW for interval 2, 55 MW for interval 3, and 60 MW for

The CAISO's DMM noted instances in summer 2021 where VERs supporting high-priority non-recallable exports had output less than the hourly export schedule. DMM noted that under the current tariff rules, the attestation of the scheduling coordinator of the VER-supporting resource that the resource can produce up to the level of the high-priority export schedule for each of the four 15-minute intervals within the hour is based on the resource's forecast *at the time of bid submission*. Depending upon when the VER submits the bid, however, the resource's forecasted capabilities at the time of bid submission can differ from the resource's actual capabilities based on the latest output forecast for the resource before the close of the real-time market. For example, the scheduling coordinator for a resource might submit its real-time market bid the day before (e.g., immediately after the close of the day-ahead market), based on the forecast available at that time, but the real-time forecast for the resource might be different.

The CAISO agrees with DMM that the existing tariff language does not sufficiently address the situation where a scheduling coordinator for a VER supporting a high-priority non-recallable export submits a real-time market bid for a specific hour based on the then-current forecast for the resource, but the forecast for that hour subsequently changes, and the resource's newly forecasted output in one or more of the applicable four 15-minute intervals within the hour is for a generation quantity less than the self-schedule export quantity. A scheduling coordinator for a VER should not be able to satisfy the tariff requirements for a resource supporting a high-priority non-recallable export by submitting an "early" bid and relying on a forecast that subsequently is updated and revised before real-time. A scheduling coordinator for a VER should be attesting to the VER's ability to support the high-priority non-recallable export based on the most recent forecast available that applies to the hour for which the scheduling coordinator submitted the bid.

If the VER forecast changes before close of the real-time market such that the VER can no longer support the initial high-priority non-recallable export schedule quantity, the scheduling coordinator should have to update the export schedule to an amount the resource can support based on the most recent forecast. For example, if a scheduling coordinator submits a high-priority non-recallable export schedule supported by a VER, into the real-time market at the close of the day ahead market (*i.e.*, on the previous day), the scheduling coordinator should update or modify that export schedule before the close of the real-time market if there are changes to the VER output forecast and the resource can no longer support the originally submitted export for the entire hour. Failure to do so can cause a failure to satisfy the requirements for a high-priority non-recallable export supported by a VER. To implement this revision, the CAISO

interval 4. In this example, the resource could support a 45 MW high-priority non-recallable export, but it could not support a high-priority non-recallable export for any higher amount.

proposes to revise the tariff as shown in the following underlined and struck-through text:

The Scheduling Coordinator for the designated resource and the Scheduling Coordinator for the export Self-Schedule shall designate a resource to support such export only if the resource is expected to have sufficient available capacity to support the export quantity throughout the entire hour. For Variable Energy Resources, this requirement can only be satisfied if the resource's forecasted output for each of the applicable four (4) fifteen (15) minute intervals in the applicable hour for which a bid has been submitted, based on the most recent forecast for that hour, at the time of bid submission is for Generation that is equal to or greater than the Self Schedule export quantity.⁹⁵

Commission acceptance of this tariff revision is just and reasonable because it will ensure high-priority non-recallable exports supported by a VER reflect the most recent forecast of capacity from that VER before market close. VERs should not support high-priority non-recallable exports if the most recent forecast for the applicable hour shows they are incapable of sustaining the export schedule level for the entire hour. Otherwise this could force the CAISO to support the export with RA Capacity. This tariff change is severable from all other tariff changes proposed in this filing.

C. The Commission Should Accept the Clarification that a High-Priority Non-Recallable Export Must Be Supported by a Resource Internal to the CAISO

In the April 28 Tariff Amendment, the CAISO explained that it was revising its tariff to state explicitly that high-priority non-recallable exports must designate a resource internal to the CAISO to support the export transaction.⁹⁶ The CAISO stated that exporters should not designate an import to support a high-priority non-recallable export. Rather, a scheduling coordinator properly should schedule such a transaction as a wheeling through self-schedule transaction, which has specific requirements under the CAISO tariff.⁹⁷ This follows the tariff definition and bidding rules for wheeling through transactions.⁹⁸ The CAISO intended the tariff provision implemented under the

⁹⁵ Revised tariff section 30.5.1(aa) contained in this filing.

⁹⁶ Transmittal letter for April 28 Tariff Amendment at 43. See *also* June 25 Order at P26 ("CAISO proposes that high priority non-recallable exports must be supported by a resource internal to the CAISO and not an import").

⁹⁷ *Id.* (citing existing tariff section 30.5.4).

⁹⁸ *Id.*

April 28 Tariff Amendment to codify existing CAISO practice.⁹⁹ The Commission approved this tariff revision in the June 25 Order.¹⁰⁰

Upon further reviewing the tariff provision in the stakeholder process for this tariff amendment, however, the CAISO realized the tariff provision as written inadvertently did not precisely reflect the CAISO's intent or the description in the April 28 Tariff Amendment or June 25 Order. The tariff inadvertently refers to the requirements as applying to Priority Wheeling Through transactions (which must schedule a supporting import) rather than high-priority non-recallable exports (which cannot schedule a supporting import). Therefore, the CAISO proposes to correct the tariff provision as shown in the following underlined and struck-through text:

A Scheduling Coordinator shall not schedule an import Self-Schedule to support an export Self-Schedule of exports at Scheduling Points explicitly sourced by non-Resource Adequacy Capacity. ~~for a Priority Wheeling Through~~ The transaction is properly scheduled as a Wheeling Through transaction as described in section 30.5.4.¹⁰¹

Commission acceptance of this clarification is just and reasonable to reflect the intent of the CAISO, as described in the April 28 Tariff Amendment, to require high-priority non-recallable exports to designate an internal resource to support the export transaction, rather than a wheeling through transaction. This tariff change is severable from all other proposed tariff changes.

D. The Commission Should Not Impose Additional Restrictions on High-Priority Non-Recallable Exports That Go Beyond the Specific Measures the CAISO Proposes Herein

In comments on the Phase 1 Draft Final Proposal, one stakeholder suggested the CAISO should incorporate flexibility into the tariff to enable it to adjust high-priority non-recallable export schedules when they exceed the non-RA Capacity of the supporting resource (e.g., due to changes in availability during the hour). In its comments on the Phase 1 Draft Final Proposal, DMM stated "it would be inappropriate to reduce PT export schedules purely on the basis that the supporting resource is producing less than its PT export schedule."¹⁰² However, DMM recommended that the CAISO reserve the right in its tariff to curtail a high-priority non-recallable export

⁹⁹ New tariff section 30.5.1(ee) contained in the April 28 Tariff Amendment.

¹⁰⁰ June 25 Order at PP 26, 43-45.

¹⁰¹ Revised tariff section 30.5.1(ee) contained in this filing.

¹⁰² Department of Market Monitoring, *Comments on Transmission Service and Marketing Scheduling Priorities Initiative, Phase 1, Draft Final Proposal*, p. 5 (Jan. 7, 2022).

schedule during most extreme system conditions when the generating resource supporting the export cannot generate at a level that would support the export, and the only other alternative is for the CAISO to curtail CAISO load.¹⁰³

These proposals go well beyond the scope of the tariff changes the CAISO proposes in this tariff amendment filing and constitute a completely new and different approach. In addition, they significantly depart from the treatment the CAISO currently affords high-priority non-recallable exports. In the underlying stakeholder process, the CAISO expressly rejected requests to reduce high-priority non-recallable exports before CAISO load, in stressed system conditions, when the supporting resource is under-producing or becomes unavailable during the hour to which its schedule applies.

Besides being beyond the scope of the CAISO's filing, such a tariff change is unwarranted. On the CAISO's system, if during the operating hour a supporting resource under-produces or goes off line due to an unexpected outage, the CAISO will continue to honor the high-priority non-recallable export on par with load for the remainder of the hour. The CAISO carries contingency reserves to cover generation that becomes unavailable in real-time.¹⁰⁴ Thus, depending on grid conditions, the CAISO may deploy contingency reserves in response to losing a generator, whether or not it was supporting a high-priority non-recallable export. The CAISO will take all appropriate actions to operate the system reliably consistent with NERC requirements and will treat high priority non-recallable exports like CAISO load.

When an export transaction is e-tagged as firm for the hour, the sink balancing authority area expects to receive the scheduled energy. Curtailing a high-priority non-recallable export ahead of load for the remainder of the hour, even when the supporting resource goes on an unplanned outage during the operating hour, could (1) adversely affect reliability in the neighboring balancing authority area expecting to continue receiving the energy, and (2) undermine the certainty and dependability the CAISO intends to provide to high-priority, non-recallable exports.

Under existing tariff section 30.5.1(aa), scheduling coordinators must notify the CAISO that a resource cannot support a high-priority recallable export for the hour. To the extent a supporting generator remains on outage, subsequent market runs will recognize that the generator cannot support a high-priority, non-recallable export. Similarly, if a VER is under producing because external conditions differ from forecasted when the schedules were accepted for the hour, the reduced output and availability will be reflected in the following hour's forecast. This will affect (*i.e.*, reduce) the high-

¹⁰³ *Id.* at 6. DMM states that examples of such situations include significant VER forecast error, errors or inaccuracies on generation outage reporting, or communication challenges between counterparties that result in a designated resource being physically unavailable to produce at the level of the high priority non-recallable export schedule.

¹⁰⁴ The CAISO allocates contingency reserve costs to exports and other load.

priority non-recallable export quantity the VER can support for the following hour, which must be commensurate with the updated forecasted output conditions.

IV. EFFECTIVE DATE OF TARIFF REVISIONS, INTERIM EFFECTIVENESS OF WHEELING THROUGH TARIFF REVISIONS, REQUEST FOR A COMMISSION ORDER BY MARCH 14, 2022, AND REQUEST FOR WAIVER

The CAISO is submitting two sets of tariff revisions with different effective dates in this filing. The first set, consisting of all the tariff revisions the CAISO proposes in this filing, will go into effect on June 1, 2022.¹⁰⁵ Because the CAISO intends all the wheeling through related tariff revisions in this filing to be interim only, the CAISO is also submitting a second set of tariff revisions that removes all such wheeling through provisions (and only those tariff provisions) from the tariff after May 31, 2024.¹⁰⁶ Thus, effective June 1, 2024, the CAISO will revert to the Commission-accepted tariff provisions that would have been in effect on June 1, 2022 and that do not specify scheduling priorities for wheeling through transactions.¹⁰⁷

Because the first and second sets of tariff revisions will become effective more than 120 days after this filing, the CAISO respectfully requests the Commission grant waiver of its notice requirement to permit their respective effective dates.¹⁰⁸ Good

¹⁰⁵ The clean tariff sheets for the first set of tariff revisions are in Attachment A to this filing, and the red-lined sheets are in Attachment B hereto. The tariff revisions in Attachment B are redlined against the tariff language the Commission accepted in its June 25 Order to be effective June 1, 2022, plus the pending tariff language in the July 26 Compliance Filing that does not pertain to wheeling throughs and does not sunset on June 1, 2022.

¹⁰⁶ The clean tariff sheets for the second set of tariff revisions are in Attachment C to this filing, and the red-lined sheets are in Attachment D hereto. Specifically, the CAISO proposes to sunset the following effective June 1, 2024: (1) tariff section 30.5.1(z); (2) the references to Priority Wheeling Through and non-Priority Wheeling Through self-schedules in revised tariff sections 31.4, 34.12.1, and 34.12.2; (3) the post-HASP allocation process in tariff section 34.12.3; (4) the tariff revision in section 31.5.5; and (5) the definition of the term Priority Wheeling Through in tariff Appendix A. Regarding removal of the tariff record for tariff section 34.12.3 and of the definition of the term Priority Wheeling Through in tariff Appendix A, Systrends does not allow changes to a newly proposed record in the same filing. Therefore, the CAISO will submit a future filing to remove both records in Systrends at least 61 days prior to the June 1, 2024 effective date.

¹⁰⁷ This is the same approach the CAISO followed in its April 28 Tariff Amendment and the Commission accepted in its June 25 Order.

¹⁰⁸ Specifically, under Section 35.11 of the Commission's regulations, 18 C.F.R. § 35.11, the CAISO respectfully requests waiver of the notice requirement in section 35.3(a)(1) of the Commission's regulations, 18 C.F.R. § 35.3(a)(1), to allow the first and second sets of tariff revisions to go into effect more than 120 days after submittal of this filing.

cause exists to grant this waiver for the first set of tariff revisions because the existing interim tariff revisions expire June 1, 2022, and the CAISO seeks to provide advance certainty to customers regarding the wheeling through rules that will be in place after that date. Good cause exists to grant this waiver regarding the second set of tariff revisions because the CAISO proposes that the wheeling through tariff revisions in this filing remain in effect only from June 1, 2022 through May 31, 2024. The CAISO made a similar waiver request in its April 28 Tariff Amendment regarding the tariff revisions that would go into effect on June 1, 2022, and the Commission approved such tariff revisions. For similar reasons, the Commission should accept the second set of tariff revisions submitted in this filing.

The CAISO also respectfully requests that the Commission issue an order on all tariff revisions submitted in this filing within 45 days of the submittal of this filing, *i.e.*, by March 14, 2022. Prompt action is required to mitigate uncertainty and prevent any material adverse impacts caused by the imminent expiration of the existing, interim rules. Issuing an order by March 14 will provide important regulatory certainty for market participants and the CAISO regarding the scheduling priorities and rules that will apply to wheeling through transactions starting June 1, 2022. It will also give market participants sufficient time to (1) make the necessary contractual arrangements or contract adjustments and (2) register with the CAISO for Priority Wheeling Through transactions for June of 2022 by the April 17, 2022 registration deadline. Thus, even though the existing tariff provisions do not expire until June 1, 2022, wheeling through customers must act by April 17, 2022 to obtain Priority Wheeling Through status for June 2022. They need to know well before that date whether the existing rules will remain in place and plan accordingly. Further, the wheeling through tariff revisions proposed in this filing are substantively the same as the interim tariff revisions proposed in the April 28 Tariff Amendment and accepted in the June 25 Order. Therefore, issuing an order by March 14, 2022 is appropriate.

One stakeholder objected to sun-setting the extended interim tariff provisions on June 1, 2024, expressing concern it would leave CAISO load unprotected. The proposed sunset date is just and reasonable for the same reasons the Commission approved a June 1, 2022 sunset date for these same tariff provisions¹⁰⁹ and, in other instances, has approved tariff revisions addressing near-term reliability challenges on an interim basis pending consideration of longer-term alternatives in subsequent stakeholder processes.¹¹⁰ The CAISO is considering longer-term solutions regarding

¹⁰⁹ See June 25 Order at P 177.

¹¹⁰ Transmittal letter for April 28 Tariff Amendment at 61-62. See *Cal. Indep. Sys. Operator Corp.*, 155 FERC ¶ 61,224, at P 1 (2016) (accepting the Aliso Canyon-related tariff revisions with an express sunset date, subject to the requirement the CAISO seek Commission authorization to extend their effectiveness); *ISO New Eng. Inc., et al.*, 144 FERC ¶ 61,204, at P 42 (2013) (stating that “given the importance of ensuring reliability in New England this coming winter . . . we accept the [proposed Winter

the treatment of wheeling through transactions in an ongoing stakeholder process dedicated to that matter.

The CAISO never intended the interim wheeling through tariff revisions it proposes to extend for two more years to be a long-term solution, and most stakeholders do not support them as long-term measures. Under these circumstances, the proposed sunset date is appropriate. Maintaining the interim wheeling through provisions will enable the CAISO to provide reliable service to native load in emergency-type conditions and grant certain wheeling through transactions a priority equal to CAISO load for the next two summers, while providing the CAISO and stakeholders sufficient time to develop and implement a longer-term solution. Although the CAISO sincerely hopes it is unnecessary, if the CAISO needs to extend the interim wheeling through tariff provisions beyond May 31, 2024 because it cannot implement the longer-term solution by that date, the CAISO can make a further FPA Section 205 filing and justify the continued effectiveness of such provisions. Also, to the extent, the CAISO can implement a longer term solution before June 1, 2024, it can make a Section 205 filing to implement such measures before that date. Nothing in this filing precludes either option.

V. COMMUNICATIONS

Correspondence and other communications regarding this filing should be directed to:

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Reliability] Program for the limited period requested,” subject to “consider[ation of] market-based solutions” in future stakeholder process); *ISO New Eng. Inc.*, 171 FERC ¶ 61,235, at PP 1, 57 (2020) (finding that implementation of proposed tariff revisions on an interim basis for winter months over upcoming two-year period “is a reasonable short-term solution to compensating in a technology-neutral manner resources that provide fuel security”).

VI. SERVICE

The CAISO has served copies of this filing on the California Public Utilities Commission, the California Energy Commission, and all parties with scheduling coordinator agreements under the CAISO tariff. In addition, the CAISO has posted a copy of the filing on the CAISO website.

VII. CONTENTS OF FILING

Besides this transmittal letter, this filing includes these attachments:

| | |
|--------------|--|
| Attachment A | Clean tariff sheets incorporating the first set of revisions described in this filing |
| Attachment B | Tariff sheets showing in red-line format the first set of revisions described in this filing |
| Attachment C | Clean tariff sheets incorporating the second set of revisions described in this filing ¹¹¹ |
| Attachment D | Tariff sheets showing in red-line format the second set of revisions described in this filing ¹¹² |
| Attachment E | Phase 1 Draft Final Proposal |
| Attachment F | CAISO Management's Memorandum and Presentation to the CAISO Board |

¹¹¹ Clean tariff sheets for the second set of tariff revisions include the changes from the first set as underlying text.

¹¹² Red-lined tariff sheets for the second set of tariff revisions include the changes from the first set as underlying text.

VIII. CONCLUSION

For the reasons set forth in this filing, the CAISO respectfully requests that the Commission accept the proposed tariff revisions effective on the dates proposed.

Respectfully submitted,

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Attachment A – First Set of Clean Tariff, effective 2022 - 2024

Transmission Service and Market Scheduling Priorities Initiative – Wheeling Through Priorities

California Independent System Operator Corporation

January 27, 2022

*Language highlighted in **YELLOW** are provisions that were set to expire on June 1, 2022 but as proposed in this filing are to be in effect until May 31, 2024.

30.5 Bidding Rules

30.5.1 General Bidding Rules

* * * * *

- (z) For a Wheeling Through Self Schedule to be eligible as a Priority Wheeling Through for a given month, the Scheduling Coordinator must notify the CAISO of the MW quantity of the power supply contract MW supporting the export Self-Schedule of the Priority Wheeling Through transaction and confirm it meets the eligibility requirements to support a Priority Wheeling Through. The Scheduling Coordinator must provide such information to the CAISO by 45 days prior to the applicable month.
- (aa) A Scheduling Coordinator for a CAISO Balancing Authority Area resource will indicate through a resource parameter as prescribed in the Business Practice Manual that it has sold capacity to an out-of-balancing authority area Load Serving Entity, and no CAISO Load Serving Entity has a right to such capacity. If the Scheduling Coordinator does not indicate this status, the resource cannot be a designated resource for an export Self-Schedule at Scheduling Points backed by non-Resource Adequacy Capacity. The CAISO will notify a Scheduling Coordinator hourly, to the extent practicable, that its resource, which is flagged to support an export, is designated by another entity to support export Self-Schedules at Scheduling Points backed by non-Resource Adequacy Capacity. Upon receiving the notice, the Scheduling Coordinator for the designated resource shall notify the CAISO if it does not have a contractual commitment to support such export Self-Schedule or does not have a reasonable expectation to be available to support the export Self Schedule. The Scheduling Coordinator for the designated

resource and the Scheduling Coordinator for the export Self-Schedule shall designate a resource to support such export only if the resource is expected to have sufficient available capacity to support the export quantity throughout the entire hour. For Variable Energy Resources, this requirement can only be satisfied if the resource's forecasted output for each of the applicable four (4) fifteen (15) minute intervals in the applicable hour for which a bid has been submitted, based on the most recent forecast for that hour, is for Generation that is equal to or greater than the Self Schedule export quantity. The designated capacity must be the deliverable capacity of a resource with Full Capacity Deliverability Status, Partial Capacity Deliverability Status, or Interim Deliverability Status that is shown on the CAISO's NQC list.

* * * * *

- (ee) A Scheduling Coordinator shall not schedule an import Self-Schedule to support an export Self-Schedule of exports at Scheduling Points explicitly sourced by non-Resource Adequacy Capacity. The transaction is properly scheduled as a Wheeling Through transaction as described in section 30.5.4.

* * * * *

31.4 CAISO Market Adjustments to Non-Priced Quantities in the IFM

All Self-Schedules are respected by SCUC to the maximum extent possible and are protected from curtailment in the Congestion Management process to the extent that there are Effective Economic Bids that can relieve Congestion. If all Effective Economic Bids in the IFM are exhausted, resource Self-Schedules between the resource's Minimum Load as defined in the Master File, or if applicable, as modified pursuant to Section 9.3.3, and the first Energy level of the first Energy Bid point will be subject to adjustments by the CAISO Market optimization based on the scheduling priorities listed below. This functionality of the optimization software is implemented through the setting of scheduling parameters as described in Section 27.4.3 and specified in Section 27.4.3.1 and the Business Practice Manuals. Through this process, imports and exports may be reduced to zero, Demand Bids may be reduced to

zero, Price Taker Demand (LAP load) may be reduced, and Generation may be reduced to a lower operating limit (or Regulation Limit) (or to a lower Regulation Limit plus any qualified Regulation Down award or Self-Provided Ancillary Services, if applicable). Any Self-Schedules below the Minimum Load level are treated as fixed Self-Schedules and are not subject to these adjustments for Congestion Management. The provisions of this section shall apply only to the extent they do not conflict with any MSS Agreement. In accordance with Section 27.4.3.5, the resources submitted in valid TOR, ETC or Converted Rights Self-Schedules shall not be adjusted in the IFM in response to an insufficiency of Effective Economic Bids. Thus the adjustment sequence for the IFM from highest priority (last to be adjusted) to lowest priority (first to be adjusted), is as follows:

| Scheduling Run Priority | Scheduling Run Parameters Under Soft Energy Bid Cap (27.4.3.2) | Scheduling Run Parameters Under Hard Energy Bid Cap (27.4.3.3) |
|--|---|---|
| Reliability Must Run (RMR) Generation pre-dispatch reduction | -\$6000 | -\$12000 |
| Day-Ahead TOR Self-Schedules reduction (balanced demand and supply reduction) | \$5,900 (demand)/ - \$5,900 (supply) | \$11800 (demand)/ -\$11800 (supply) |
| Day-Ahead ETC and Converted Rights Self-Schedules reduction; different ETC priority levels will be observed based upon global ETC priorities provided to the CAISO by the Responsible PTOs | \$5100 to \$5900 (demand)/ -\$5100 to -\$5900 (supply) | \$10200 to \$11800 (demand)/ -\$10200 to -\$11800 (supply) |
| Internal Transmission Constraint relaxation for the IFM pursuant to Section 27.4.3.1 | \$5000 | \$10000 |
| The export Self-Schedule of a Priority Wheeling Through ; Self-Schedules of CAISO Demand reduction subject to Section 31.3.1.3; exports explicitly identified in a Resource Adequacy Plan to be served by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports; and Self-Schedules of exports at Scheduling Points explicitly sourced by non-Resource Adequacy Capacity | \$1800 | \$3600 |
| Self-Schedules of exports at Scheduling Points not explicitly sourced by non-Resource Adequacy Capacity, except those exports explicitly identified in a Resource Adequacy Plan to be served by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports as set forth in Section 31.4(d), and the export Self-Schedule of a non-Priority Wheeling Through | \$1050 | \$2100 |
| Day-Ahead Regulatory Must-Run Generation and Regulatory Must-Take Generation reduction | -\$1350 | -\$2700 |

| | | |
|---|---------|---------|
| Other Self-Schedules of Supply reduction, and the import Self-Schedule of a Priority Wheeling Through | -\$1100 | -\$2200 |
| The import Self-Schedule of a non-Priority Wheeling Through | \$0 | \$0 |

* * * * *

31.5.5 Selection and Commitment of RUC Capacity

Capacity that is not already scheduled in the IFM may be selected as RUC Capacity through the RUC process of the DAM. The RUC optimization will select RUC Capacity and produce nodal RUC Prices by minimizing total Bid cost based on RUC Availability Bids and Start-Up, Minimum Load Bids and Transition Costs. If RUC cannot schedule sufficient capacity to meet the RUC Procurement Target, a RUC Award or RUC Schedule will be issued to imports providing RA Capacity for the full amount of their RA Capacity. RUC will not consider Start-Up, Minimum Load Bids, or Transition Costs for resources already committed in the IFM. The RUC Capacity of a resource is the incremental amount of capacity selected in RUC above the resource's Day-Ahead Schedule. The resource's Day-Ahead Schedule plus its RUC Capacity comprise the resource's RUC Schedule. The CAISO will only issue RUC Start-Up Instructions to resources committed in RUC that must receive a Start-Up Instruction in the Day-Ahead in order to be available to meet Real-Time Demand. RUC Schedules will be provided to Scheduling Coordinators even if a RUC Start-Up Instruction is not issued at that time. RUC shall not Shut Down resources scheduled through the IFM and RUC will not commit a Multi-Stage Generating Resource to a lower MSG Configuration that is unable to support the Energy scheduled in the IFM. If the RUC process cannot find a feasible solution given the resources committed in the IFM, the RUC process will adjust constraints as described in Section 31.5.4 to arrive at a feasible solution that accommodates all the resources committed in the IFM, and any necessary de-commitment of IFM committed units shall be effectuated through an Exceptional Dispatch.

* * * * *

34.12.1 Increasing Supply

The scheduling priorities as defined in the RTM optimization to meet the need for increasing Supply as reflected from higher to lower priority are as follows:

| Scheduling Run Priority | Scheduling Parameters Under Soft Energy Bid Cap (27.4.3.2) | Scheduling Parameters Under Hard Energy Bid Cap (27.4.3.3) |
|--|--|--|
| CAISO Forecast of CAISO Demand; the export Self-Schedule of a Priority Wheeling Through; exports explicitly identified in a Resource Adequacy Plan backed by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports; or Self-Schedules for exports at Scheduling Points backed by Generation from non-Resource Adequacy Capacity or from non-RUC Capacity | \$1450 | \$2900 |
| RUC Schedules that are Self-Schedules of exports at Scheduling Points not backed by Generation from non-Resource Adequacy Capacity, or the RUC Schedules that are the export Self-Schedules of non-Priority Wheeling Throughs | \$1250 | \$2500 |
| Real-Time Market Self-Schedules of exports at Scheduling Points not backed by Generation from non-Resource Adequacy Capacity or non-RUC capacity, or the Real-Time Market Self-Schedules that are the export Self-Schedules of a non-Priority Wheeling Through | \$1150 | \$2300 |
| Contingency Only Operating Reserve if activated by Operator to provide Energy (as indicated by the Contingency Flag and the Contingency condition) | \$1000 | \$2000 |

34.12.2 Decreasing Supply

The scheduling priorities as defined in the RTM optimization to meet the need for decreasing Supply as reflected from higher to lower priority are as follows:

| Scheduling Run Priority | Scheduling Parameters | Scheduling Parameters Under Hard Energy Bid |
|-------------------------|-----------------------|---|
|-------------------------|-----------------------|---|

| | <u>Under Soft Energy Bid Cap (27.4.3.2)</u> | <u>Cap (27.4.3.3)</u> |
|--|---|-----------------------|
| Non-Participating Load increase | Not Applicable | Not Applicable |
| Reliability Must Run (RMR) Schedule (Day-Ahead manual pre-dispatch or Manual RMR Dispatches or Dispatches that are flagged as RMR Dispatches following the MPM, for Legacy RMR Units and Exceptional Dispatch for RMR Resources process) | -\$6000 | -\$12000 |
| Transmission Ownership Right (TOR) Self-Schedule | -\$5900 | -\$11800 |
| Existing Rights (ETC) Self-Schedule | -\$5100 to -\$5900 | -\$10200 to -\$11800 |
| Regulatory Must-Run and Regulatory Must-Take (RMT) Self-Schedule; | -\$1400 | -\$2800 |
| Participating Load increase | Not Applicable | Not Applicable |
| Day-Ahead Supply Schedule | -\$1200 | -\$2400 |
| Self-Schedule Hourly Block | -\$1100 | -\$2200 |
| Import Self-Schedule of a non-Priority Wheeling Through | \$0 | \$0 |

These dispatch priorities as defined in the RTM optimization may be superseded by operator actions and procedures as necessary to ensure reliable operations.

34.12.3

In the event an Intertie is constrained in the import direction by a scheduling limit or Path 26 is constrained in the north-south direction, when HASP cannot meet CAISO Forecast of CAISO Demand or fully accommodate a Priority Wheeling Through transaction, the CAISO will perform a post-HASP process to pro rata allocate available transmission capacity between Load within the CAISO Balancing Authority Area and Priority Wheel Through transactions, as described in the Business Practice Manual. The pro rata share of Load within the CAISO Balancing Authority Area will be based on the lower of each applicable Resource Adequacy Resource's Real-Time Energy Bid quantity or its shown Resource Adequacy Capacity. The Priority Wheeling Through pro rata share for each Self-Schedule will be based on the lowest of (1) 110 percent of the submitted Day-Ahead Market Self-Schedule of the Priority Wheeling Through transaction, (2) the submitted Real-Time Market Self-Schedule of the Priority Wheeling Through transaction, or (3) the Priority Wheeling Through quantity requested 45-days in advance of the

month. The available transmission capacity the CAISO awards to Priority Wheeling Through transactions in the post-HASP process cannot exceed the Priority Wheeling Through quantity the CAISO calculates in this pro rata allocation. Energy scheduled via the post-HASP process will be settled as Exceptional Dispatch Energy pursuant to Section 11.5.6.1, as applicable.

* * * * *

Appendix A

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- Priority Wheeling Through

A Self-Schedule that is part of a Wheeling Through transaction consistent with Section 30.5.4 that is supported by (1) a firm power supply contract to serve an external Load Serving Entity's load throughout the calendar month and (2) monthly firm transmission the external Load Serving Entity has procured under applicable open access tariffs, or comparable transmission tariffs, for Hours Ending 07:00 through 22:00, Monday through Saturday excluding NERC holidays, from the source to a CAISO Scheduling Point.

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Attachment B – First Set of Tariff Redlines, effective 2022 - 2024

Transmission Service and Market Scheduling Priorities Initiative – Wheeling Through Priorities

California Independent System Operator Corporation

January 27, 2022

*Redlines highlighted in **YELLOW** are provisions that were set to expire on June 1, 2022 but as proposed in this filing are to be in effect until May 31, 2024.

Simple **redline are changes proposed in this filing unrelated to the provisions that were set to expire on June 1, 2022.

30.5 Bidding Rules

30.5.1 General Bidding Rules

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(z) For a Wheeling Through Self Schedule to be eligible as a Priority Wheeling Through for a given month, the Scheduling Coordinator must notify the CAISO of the MW quantity of the power supply contract MW supporting the export Self-Schedule of the Priority Wheeling Through transaction and confirm it meets the eligibility requirements to support a Priority Wheeling Through. The Scheduling Coordinator must provide such information to the CAISO by 45 days prior to the applicable month.

(aa) A Scheduling Coordinator for a CAISO Balancing Authority Area resource will indicate through a resource parameter as prescribed in the Business Practice Manual that it has sold capacity to an out-of-balancing authority area Load Serving Entity, and no CAISO Load Serving Entity has a right to such capacity. If the Scheduling Coordinator does not indicate this status, the resource cannot be a designated resource for an export Self-Schedule at Scheduling Points backed by non-Resource Adequacy Capacity. The CAISO will notify a Scheduling Coordinator hourly, to the extent practicable, that its resource, which is flagged to support an export, is designated by another entity to support export Self-Schedules at Scheduling Points backed by non-Resource Adequacy Capacity. Upon receiving the notice, the Scheduling Coordinator for the designated resource shall notify the CAISO if it does not have a contractual commitment to support

such export Self-Schedule or does not have a reasonable expectation to be available to support the export Self Schedule. The Scheduling Coordinator for the designated resource and the Scheduling Coordinator for the export Self-Schedule shall designate a resource to support such export only if the resource is expected to have sufficient available capacity to support the export quantity throughout the entire hour. For Variable Energy Resources, this requirement can only be satisfied if the resource's forecasted output for each of the applicable four (4) fifteen (15) minute intervals in the applicable hour for which a bid has been submitted, based on the most recent forecast for that hour, at the time of bid submission is for Generation that is equal to or greater than the Self Schedule export quantity. The designated capacity must be the deliverable capacity of a resource with Full Capacity Deliverability Status, Partial Capacity Deliverability Status, or Interim Deliverability Status that is shown on the CAISO's NQC list.

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- (ee) A Scheduling Coordinator shall not schedule an import Self-Schedule to support an export Self-Schedule of exports at Scheduling Points explicitly sourced by non-Resource Adequacy Capacity. for a Priority Wheeling Through. The transaction is properly scheduled as a Wheeling Through transaction as described in section 30.5.4.

* * * * *

31.4 CAISO Market Adjustments to Non-Priced Quantities in the IFM

All Self-Schedules are respected by SCUC to the maximum extent possible and are protected from curtailment in the Congestion Management process to the extent that there are Effective Economic Bids that can relieve Congestion. If all Effective Economic Bids in the IFM are exhausted, resource Self-Schedules between the resource's Minimum Load as defined in the Master File, or if applicable, as modified pursuant to Section 9.3.3, and the first Energy level of the first Energy Bid point will be subject to adjustments by the CAISO Market optimization based on the scheduling priorities listed below. This functionality of the optimization software is implemented through the setting of scheduling parameters as

described in Section 27.4.3 and specified in Section 27.4.3.1 and the Business Practice Manuals. Through this process, imports and exports may be reduced to zero, Demand Bids may be reduced to zero, Price Taker Demand (LAP load) may be reduced, and Generation may be reduced to a lower operating limit (or Regulation Limit) (or to a lower Regulation Limit plus any qualified Regulation Down award or Self-Provided Ancillary Services, if applicable). Any Self-Schedules below the Minimum Load level are treated as fixed Self-Schedules and are not subject to these adjustments for Congestion Management. The provisions of this section shall apply only to the extent they do not conflict with any MSS Agreement. In accordance with Section 27.4.3.5, the resources submitted in valid TOR, ETC or Converted Rights Self-Schedules shall not be adjusted in the IFM in response to an insufficiency of Effective Economic Bids. Thus the adjustment sequence for the IFM from highest priority (last to be adjusted) to lowest priority (first to be adjusted), is as follows:

| Scheduling Run Priority | Scheduling Run Parameters Under Soft Energy Bid Cap (27.4.3.2) | Scheduling Run Parameters Under Hard Energy Bid Cap (27.4.3.3) |
|---|---|---|
| Reliability Must Run (RMR) Generation pre-dispatch reduction | -\$6000 | -\$12000 |
| Day-Ahead TOR Self-Schedules reduction (balanced demand and supply reduction) | \$5,900 (demand)/ - \$5,900 (supply) | \$11800 (demand)/ -\$11800 (supply) |
| Day-Ahead ETC and Converted Rights Self-Schedules reduction; different ETC priority levels will be observed based upon global ETC priorities provided to the CAISO by the Responsible PTOs | \$5100 to \$5900 (demand)/ -\$5100 to -\$5900 (supply) | \$10200 to \$11800 (demand)/ -\$10200 to -\$11800 (supply) |
| Internal Transmission Constraint relaxation for the IFM pursuant to Section 27.4.3.1 | \$5000 | \$10000 |
| The export Self-Schedule of a Priority Wheeling Through ; Self-Schedules of CAISO Demand reduction subject to Section 31.3.1.3; exports explicitly identified in a Resource Adequacy Plan to be served by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports; and Self-Schedules of exports at Scheduling Points explicitly sourced by non-Resource Adequacy Capacity | \$1800 | \$3600 |
| Self-Schedules of exports at Scheduling Points not explicitly sourced by non-Resource Adequacy Capacity, except those exports explicitly identified in a Resource Adequacy Plan to be served by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports as set forth in Section 31.4(d), and the export Self-Schedule of a non-Priority Wheeling Through | \$1050 | \$2100 |

| | | |
|---|---------|---------|
| Day-Ahead Regulatory Must-Run Generation and Regulatory Must-Take Generation reduction | -\$1350 | -\$2700 |
| Other Self-Schedules of Supply reduction, and the import Self-Schedule of a Priority Wheeling Through | -\$1100 | -\$2200 |
| The import Self-Schedule of a non-Priority Wheeling Through | \$0 | \$0 |

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31.5.5 Selection and Commitment of RUC Capacity

Capacity that is not already scheduled in the IFM may be selected as RUC Capacity through the RUC process of the DAM. The RUC optimization will select RUC Capacity and produce nodal RUC Prices by minimizing total Bid cost based on RUC Availability Bids and Start-Up, Minimum Load Bids and Transition Costs. **If RUC cannot schedule sufficient capacity to meet the RUC Procurement Target, a RUC Award or RUC Schedule will be issued to imports providing RA Capacity for the full amount of their RA Capacity.**

RUC will not consider Start-Up, Minimum Load Bids, or Transition Costs for resources already committed in the IFM. The RUC Capacity of a resource is the incremental amount of capacity selected in RUC above the resource's Day-Ahead Schedule. The resource's Day-Ahead Schedule plus its RUC Capacity comprise the resource's RUC Schedule. The CAISO will only issue RUC Start-Up Instructions to resources committed in RUC that must receive a Start-Up Instruction in the Day-Ahead in order to be available to meet Real-Time Demand. RUC Schedules will be provided to Scheduling Coordinators even if a RUC Start-Up Instruction is not issued at that time. RUC shall not Shut Down resources scheduled through the IFM and RUC will not commit a Multi-Stage Generating Resource to a lower MSG Configuration that is unable to support the Energy scheduled in the IFM. If the RUC process cannot find a feasible solution given the resources committed in the IFM, the RUC process will adjust constraints as described in Section 31.5.4 to arrive at a feasible solution that accommodates all the resources committed in the IFM, and any necessary de-commitment of IFM committed units shall be effectuated through an Exceptional Dispatch.

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34.12.1 Increasing Supply

The scheduling priorities as defined in the RTM optimization to meet the need for increasing Supply as reflected from higher to lower priority are as follows:

| Scheduling Run Priority | Scheduling Parameters Under Soft Energy Bid Cap (27.4.3.2) | Scheduling Parameters Under Hard Energy Bid Cap (27.4.3.3) |
|---|--|--|
| CAISO Forecast of CAISO Demand; the export Self-Schedule of a Priority Wheeling Through; exports explicitly identified in a Resource Adequacy Plan backed by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports; or Self-Schedules for exports at Scheduling Points backed by Generation from non-Resource Adequacy Capacity or from non-RUC Capacity | \$1450 | \$2900 |
| RUC Schedules that are Self-Schedules of exports at Scheduling Points not backed by Generation from non-Resource Adequacy Capacity, or the RUC Schedules that are the export Self-Schedules of non-Priority Wheeling Throughs | \$1250 | \$2500 |
| Real-Time Market Self-Schedules of exports at Scheduling Points not backed by Generation from non-Resource Adequacy Capacity or non-RUC capacity, or the Real-Time Market Self-Schedules that are the export Self-Schedules of a non-Priority Wheeling Through | \$1150 | \$2300 |
| Contingency Only Operating Reserve if activated by Operator to provide Energy (as indicated by the Contingency Flag and the Contingency condition) | \$1000 | \$2000 |

34.12.2 Decreasing Supply

The scheduling priorities as defined in the RTM optimization to meet the need for decreasing Supply as reflected from higher to lower priority are as follows:

| Scheduling Run Priority | Scheduling Parameters Under Soft Energy Bid Cap (27.4.3.2) | Scheduling Parameters Under Hard Energy Bid Cap (27.4.3.3) |
|--|---|---|
| Non-Participating Load increase | Not Applicable | Not Applicable |
| Reliability Must Run (RMR) Schedule (Day-Ahead manual pre-dispatch or Manual RMR Dispatches or Dispatches that are flagged as RMR Dispatches following the MPM, for Legacy RMR Units and Exceptional Dispatch for RMR Resources process) | -\$6000 | -\$12000 |
| Transmission Ownership Right (TOR) Self-Schedule | -\$5900 | -\$11800 |
| Existing Rights (ETC) Self-Schedule | -\$5100 to -\$5900 | -\$10200 to -\$11800 |
| Regulatory Must-Run and Regulatory Must-Take (RMT) Self-Schedule; | -\$1400 | -\$2800 |
| Participating Load increase | Not Applicable | Not Applicable |
| Day-Ahead Supply Schedule | -\$1200 | -\$2400 |
| Self-Schedule Hourly Block | -\$1100 | -\$2200 |
| Import Self-Schedule of a non-Priority Wheeling Through | \$0 | \$0 |

These dispatch priorities as defined in the RTM optimization may be superseded by operator actions and procedures as necessary to ensure reliable operations.

34.12.3

In the event an Intertie is constrained in the import direction by a scheduling limit or Path 26 is constrained in the north-south direction, when HASP cannot meet CAISO Forecast of CAISO Demand or fully accommodate a Priority Wheeling Through transaction, the CAISO will perform a post-HASP process to pro rata allocate available transmission capacity between Load within the CAISO Balancing Authority Area and Priority Wheel Through transactions, as described in the Business Practice Manual. The pro rata share of Load within the CAISO Balancing Authority Area will be based on the lower of each applicable Resource Adequacy Resource's Real-Time Energy Bid quantity or its shown Resource Adequacy Capacity. The Priority Wheeling Through pro rata share for each Self-Schedule will be based on the lowest of (1) 110 percent of the submitted Day-Ahead Market Self-Schedule of the Priority Wheeling Through transaction, (2) the submitted Real-Time Market Self-Schedule of the Priority Wheeling

Through transaction, or (3) the Priority Wheeling Through quantity requested 45-days in advance of the month. The available transmission capacity the CAISO awards to Priority Wheeling Through transactions in the post-HASP process cannot exceed the Priority Wheeling Through quantity the CAISO calculates in this pro rata allocation. Energy scheduled via the post-HASP process will be settled as Exceptional Dispatch Energy pursuant to Section 11.5.6.1, as applicable.

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Appendix A

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- Priority Wheeling Through

A Self-Schedule that is part of a Wheeling Through transaction consistent with Section 30.5.4 that is supported by (1) a firm power supply contract to serve an external Load Serving Entity's load throughout the calendar month and (2) monthly firm transmission the external Load Serving Entity has procured under applicable open access tariffs, or comparable transmission tariffs, for Hours Ending 07:00 through 22:00, Monday through Saturday excluding NERC holidays, from the source to a CAISO Scheduling Point.

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Attachment C – Second Set of Clean Tariff, effective 2024

Transmission Service and Market Scheduling Priorities Initiative – Wheeling Through Priorities

California Independent System Operator Corporation

January 27, 2022

30.5 Bidding Rules

30.5.1 General Bidding Rules

* * * * *

(z) [Not Used]

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31.4 CAISO Market Adjustments to Non-Priced Quantities in the IFM

All Self-Schedules are respected by SCUC to the maximum extent possible and are protected from curtailment in the Congestion Management process to the extent that there are Effective Economic Bids that can relieve Congestion. If all Effective Economic Bids in the IFM are exhausted, resource Self-Schedules between the resource's Minimum Load as defined in the Master File, or if applicable, as modified pursuant to Section 9.3.3, and the first Energy level of the first Energy Bid point will be subject to adjustments by the CAISO Market optimization based on the scheduling priorities listed below. This functionality of the optimization software is implemented through the setting of scheduling parameters as described in Section 27.4.3 and specified in Section 27.4.3.1 and the Business Practice Manuals. Through this process, imports and exports may be reduced to zero, Demand Bids may be reduced to zero, Price Taker Demand (LAP load) may be reduced, and Generation may be reduced to a lower operating limit (or Regulation Limit) (or to a lower Regulation Limit plus any qualified Regulation Downward or Self-Provided Ancillary Services, if applicable). Any Self-Schedules below the Minimum Load level are treated as fixed Self-Schedules and are not subject to these adjustments for Congestion Management. The provisions of this section shall apply only to the extent they do not conflict with any MSS Agreement. In accordance with Section 27.4.3.5, the resources submitted in valid TOR, ETC or Converted Rights Self-Schedules shall not be adjusted in the IFM in response to an insufficiency of Effective Economic Bids. Thus the adjustment sequence for the IFM from highest priority (last to be adjusted) to lowest priority (first to be adjusted), is as follows:

| Scheduling Run Priority | Scheduling Run Parameters Under Soft Energy Bid Cap (27.4.3.2) | Scheduling Run Parameters Under Hard Energy Bid Cap (27.4.3.3) |
|--|---|---|
| Reliability Must Run (RMR) Generation pre-dispatch reduction | -\$6000 | -\$12000 |
| Day-Ahead TOR Self-Schedules reduction (balanced demand and supply reduction) | \$5,900 (demand)/ - \$5,900 (supply) | \$11800 (demand)/ -\$11800 (supply) |
| Day-Ahead ETC and Converted Rights Self-Schedules reduction; different ETC priority levels will be observed based upon global ETC priorities provided to the CAISO by the Responsible PTOs | \$5100 to \$5900 (demand)/ -\$5100 to -\$5900 (supply) | \$10200 to \$11800 (demand)/ -\$10200 to -\$11800 (supply) |
| Internal Transmission Constraint relaxation for the IFM pursuant to Section 27.4.3.1 | \$5000 | \$10000 |
| Self-Schedules of CAISO Demand reduction subject to Section 31.3.1.3; exports explicitly identified in a Resource Adequacy Plan to be served by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports; and Self-Schedules of exports at Scheduling Points explicitly sourced by non-Resource Adequacy Capacity | \$1800 | \$3600 |
| Self-Schedules of exports at Scheduling Points not explicitly sourced by non-Resource Adequacy Capacity, except those exports explicitly identified in a Resource Adequacy Plan to be served by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports as set forth in Section 31.4(d) | \$1050 | \$2100 |
| Day-Ahead Regulatory Must-Run Generation and Regulatory Must-Take Generation reduction | -\$1350 | -\$2700 |
| Other Self-Schedules of Supply reduction | -\$1100 | -\$2200 |

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31.5.5 Selection and Commitment of RUC Capacity

Capacity that is not already scheduled in the IFM may be selected as RUC Capacity through the RUC process of the DAM. The RUC optimization will select RUC Capacity and produce nodal RUC Prices by minimizing total Bid cost based on RUC Availability Bids and Start-Up, Minimum Load Bids and Transition Costs. RUC will not consider Start-Up, Minimum Load Bids, or Transition Costs for resources already committed in the IFM. The RUC Capacity of a resource is the incremental amount of capacity selected in RUC above the resource’s Day-Ahead Schedule. The resource’s Day-Ahead Schedule plus its RUC

Capacity comprise the resource’s RUC Schedule. The CAISO will only issue RUC Start-Up Instructions to resources committed in RUC that must receive a Start-Up Instruction in the Day-Ahead in order to be available to meet Real-Time Demand. RUC Schedules will be provided to Scheduling Coordinators even if a RUC Start-Up Instruction is not issued at that time. RUC shall not Shut Down resources scheduled through the IFM and RUC will not commit a Multi-Stage Generating Resource to a lower MSG Configuration that is unable to support the Energy scheduled in the IFM. If the RUC process cannot find a feasible solution given the resources committed in the IFM, the RUC process will adjust constraints as described in Section 31.5.4 to arrive at a feasible solution that accommodates all the resources committed in the IFM, and any necessary de-commitment of IFM committed units shall be effectuated through an Exceptional Dispatch.

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34.12.1 Increasing Supply

The scheduling priorities as defined in the RTM optimization to meet the need for increasing Supply as reflected from higher to lower priority are as follows:

| Scheduling Run Priority | Scheduling Parameters Under Soft Energy Bid Cap (27.4.3.2) | Scheduling Parameters Under Hard Energy Bid Cap (27.4.3.3) |
|---|---|---|
| CAISO Forecast of CAISO Demand; exports explicitly identified in a Resource Adequacy Plan backed by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports; or Self-Schedules for exports at Scheduling Points backed by Generation from non-Resource Adequacy Capacity or from non-RUC Capacity | \$1450 | \$2900 |
| RUC schedules that are Self-Schedules of exports at Scheduling Points not backed by Generation from non-Resource Adequacy Capacity | \$1250 | \$2500 |
| Real-Time Market Self-Schedules of exports at Scheduling Points not backed by Generation from non-Resource Adequacy Capacity or non-RUC | \$1150 | \$2300 |

| | | |
|--|--------|--------|
| capacity | | |
| Contingency Only Operating Reserve if activated by Operator to provide Energy (as indicated by the Contingency Flag and the Contingency condition) | \$1000 | \$2000 |

34.12.2 Decreasing Supply

The scheduling priorities as defined in the RTM optimization to meet the need for decreasing Supply as reflected from higher to lower priority are as follows:

| Scheduling Run Priority | <u>Scheduling Parameters Under Soft Energy Bid Cap (27.4.3.2)</u> | <u>Scheduling Parameters Under Hard Energy Bid Cap (27.4.3.3)</u> |
|--|--|--|
| Non-Participating Load increase | Not Applicable | Not Applicable |
| Reliability Must Run (RMR) Schedule (Day-Ahead manual pre-dispatch or Manual RMR Dispatches or Dispatches that are flagged as RMR Dispatches following the MPM, for Legacy RMR Units and Exceptional Dispatch for RMR Resources process) | -\$6000 | -\$12000 |
| Transmission Ownership Right (TOR) Self-Schedule | -\$5900 | -\$11800 |
| Existing Rights (ETC) Self-Schedule | -\$5100 to -\$5900 | -\$10200 to -\$11800 |
| Regulatory Must-Run and Regulatory Must-Take (RMT) Self-Schedule; | -\$1400 | -\$2800 |
| Participating Load increase | Not Applicable | Not Applicable |
| Day-Ahead Supply Schedule | -\$1200 | -\$2400 |
| Self-Schedule Hourly Block | -\$1100 | -\$2200 |

These dispatch priorities as defined in the RTM optimization may be superseded by operator actions and procedures as necessary to ensure reliable operations.

34.12.3 [Not Used]

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Appendix A

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- [Not Used]

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Attachment D – Second Set of Tariff Redlines, effective 2024

Transmission Service and Market Scheduling Priorities Initiative – Wheeling Through Priorities

California Independent System Operator Corporation

January 27, 2022

****This document reflects redlines that originally were to take effect on June 1, 2022, but are now set to take effect on June 1, 2024.**

30.5 Bidding Rules

30.5.1 General Bidding Rules

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- (z) ~~[Not Used] For a Wheeling Through Self Schedule to be eligible as a Priority Wheeling Through for a given month, the Scheduling Coordinator must notify the CAISO of the MW quantity of the power supply contract MW supporting the export Self Schedule of the Priority Wheeling Through transaction and confirm it meets the eligibility requirements to support a Priority Wheeling Through. The Scheduling Coordinator must provide such information to the CAISO by 45 days prior to the applicable month for all months thereafter.~~

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31.4 CAISO Market Adjustments to Non-Priced Quantities in the IFM

All Self-Schedules are respected by SCUC to the maximum extent possible and are protected from curtailment in the Congestion Management process to the extent that there are Effective Economic Bids that can relieve Congestion. If all Effective Economic Bids in the IFM are exhausted, resource Self-Schedules between the resource's Minimum Load as defined in the Master File, or if applicable, as modified pursuant to Section 9.3.3, and the first Energy level of the first Energy Bid point will be subject to adjustments by the CAISO Market optimization based on the scheduling priorities listed below. This functionality of the optimization software is implemented through the setting of scheduling parameters as described in Section 27.4.3 and specified in Section 27.4.3.1 and the Business Practice Manuals. Through this process, imports and exports may be reduced to zero, Demand Bids may be reduced to zero, Price Taker Demand (LAP load) may be reduced, and Generation may be reduced to a lower

operating limit (or Regulation Limit) (or to a lower Regulation Limit plus any qualified Regulation Down award or Self-Provided Ancillary Services, if applicable). Any Self-Schedules below the Minimum Load level are treated as fixed Self-Schedules and are not subject to these adjustments for Congestion Management. The provisions of this section shall apply only to the extent they do not conflict with any MSS Agreement. In accordance with Section 27.4.3.5, the resources submitted in valid TOR, ETC or Converted Rights Self-Schedules shall not be adjusted in the IFM in response to an insufficiency of Effective Economic Bids. Thus the adjustment sequence for the IFM from highest priority (last to be adjusted) to lowest priority (first to be adjusted), is as follows:

| Scheduling Run Priority | Scheduling Run Parameters Under Soft Energy Bid Cap (27.4.3.2) | Scheduling Run Parameters Under Hard Energy Bid Cap (27.4.3.3) |
|---|--|--|
| Reliability Must Run (RMR) Generation pre-dispatch reduction | -\$6000 | -\$12000 |
| Day-Ahead TOR Self-Schedules reduction (balanced demand and supply reduction) | \$5,900 (demand)/ - \$5,900 (supply) | \$11800 (demand)/ -\$11800 (supply) |
| Day-Ahead ETC and Converted Rights Self-Schedules reduction; different ETC priority levels will be observed based upon global ETC priorities provided to the CAISO by the Responsible PTOs | \$5100 to \$5900 (demand)/ -\$5100 to -\$5900 (supply) | \$10200 to \$11800 (demand)/ -\$10200 to -\$11800 (supply) |
| Internal Transmission Constraint relaxation for the IFM pursuant to Section 27.4.3.1 | \$5000 | \$10000 |
| The export Self-Schedule of a Priority Wheeling Through ; Self-Schedules of CAISO Demand reduction subject to Section 31.3.1.3; exports explicitly identified in a Resource Adequacy Plan to be served by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports; and Self-Schedules of exports at Scheduling Points explicitly sourced by non-Resource Adequacy Capacity | \$1800 | \$3600 |
| Self-Schedules of exports at Scheduling Points not explicitly sourced by non-Resource Adequacy Capacity, except those exports explicitly identified in a Resource Adequacy Plan to be served by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports as set forth in Section 31.4(d), and the export Self-Schedule of a non-Priority Wheeling Through | \$1050 | \$2100 |
| Day-Ahead Regulatory Must-Run Generation and Regulatory Must-Take Generation reduction | -\$1350 | -\$2700 |
| Other Self-Schedules of Supply reduction, and the import Self-Schedule of a Priority Wheeling Through | -\$1100 | -\$2200 |
| The import Self-Schedule of a non-Priority | \$0 | \$0 |

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31.5.5 Selection and Commitment of RUC Capacity

Capacity that is not already scheduled in the IFM may be selected as RUC Capacity through the RUC process of the DAM. The RUC optimization will select RUC Capacity and produce nodal RUC Prices by minimizing total Bid cost based on RUC Availability Bids and Start-Up, Minimum Load Bids and Transition Costs. ~~If RUC cannot schedule sufficient capacity to meet the RUC Procurement Target, a RUC Award or RUC Schedule will be issued to imports providing RA Capacity for the full amount of their RA Capacity.~~ RUC will not consider Start-Up, Minimum Load Bids, or Transition Costs for resources already committed in the IFM. The RUC Capacity of a resource is the incremental amount of capacity selected in RUC above the resource's Day-Ahead Schedule. The resource's Day-Ahead Schedule plus its RUC Capacity comprise the resource's RUC Schedule. The CAISO will only issue RUC Start-Up Instructions to resources committed in RUC that must receive a Start-Up Instruction in the Day-Ahead in order to be available to meet Real-Time Demand. RUC Schedules will be provided to Scheduling Coordinators even if a RUC Start-Up Instruction is not issued at that time. RUC shall not Shut Down resources scheduled through the IFM and RUC will not commit a Multi-Stage Generating Resource to a lower MSG Configuration that is unable to support the Energy scheduled in the IFM. If the RUC process cannot find a feasible solution given the resources committed in the IFM, the RUC process will adjust constraints as described in Section 31.5.4 to arrive at a feasible solution that accommodates all the resources committed in the IFM, and any necessary de-commitment of IFM committed units shall be effectuated through an Exceptional Dispatch.

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34.12.1 Increasing Supply

The scheduling priorities as defined in the RTM optimization to meet the need for increasing Supply as reflected from higher to lower priority are as follows:

| Scheduling Run Priority | Scheduling Parameters Under Soft Energy Bid Cap (27.4.3.2) | Scheduling Parameters Under Hard Energy Bid Cap (27.4.3.3) |
|--|--|--|
| CAISO Forecast of CAISO Demand; the export Self-Schedule of a Priority Wheeling Through ; exports explicitly identified in a Resource Adequacy Plan backed by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports; or Self-Schedules for exports at Scheduling Points backed by Generation from non-Resource Adequacy Capacity or from non-RUC Capacity | \$1450 | \$2900 |
| RUC schedules that are Self-Schedules of exports at Scheduling Points not backed by Generation from non-Resource Adequacy Capacity or the RUC Schedules that are the export Self-Schedules of non-Priority Wheeling Throughs | \$1250 | \$2500 |
| Real-Time Market Self-Schedules of exports at Scheduling Points not backed by Generation from non-Resource Adequacy Capacity or non-RUC capacity, or the Real-Time Market Self-Schedules that are the export Self-Schedules of a non-Priority Wheeling Through | \$1150 | \$2300 |
| Contingency Only Operating Reserve if activated by Operator to provide Energy (as indicated by the Contingency Flag and the Contingency condition) | \$1000 | \$2000 |

34.12.2 Decreasing Supply

The scheduling priorities as defined in the RTM optimization to meet the need for decreasing Supply as reflected from higher to lower priority are as follows:

| Scheduling Run Priority | Scheduling Parameters Under Soft Energy Bid Cap (27.4.3.2) | Scheduling Parameters Under Hard Energy Bid Cap (27.4.3.3) |
|---------------------------------|--|--|
| Non-Participating Load increase | Not Applicable | Not Applicable |

| | | |
|--|--------------------|----------------------|
| Reliability Must Run (RMR) Schedule (Day-Ahead manual pre-dispatch or Manual RMR Dispatches or Dispatches that are flagged as RMR Dispatches following the MPM, for Legacy RMR Units and Exceptional Dispatch for RMR Resources process) | -\$6000 | -\$12000 |
| Transmission Ownership Right (TOR) Self-Schedule | -\$5900 | -\$11800 |
| Existing Rights (ETC) Self-Schedule | -\$5100 to -\$5900 | -\$10200 to -\$11800 |
| Regulatory Must-Run and Regulatory Must-Take (RMT) Self-Schedule; | -\$1400 | -\$2800 |
| Participating Load increase | Not Applicable | Not Applicable |
| Day-Ahead Supply Schedule | -\$1200 | -\$2400 |
| Self-Schedule Hourly Block | -\$1100 | -\$2200 |
| Import Self-Schedule of a non-Priority Wheeling Through | \$0 | \$0 |

These dispatch priorities as defined in the RTM optimization may be superseded by operator actions and procedures as necessary to ensure reliable operations.

34.12.3 **[Not Used]**

~~In the event an Intertie is constrained in the import direction by a scheduling limit or Path 26 is constrained in the north-south direction, when HASP cannot meet CAISO Forecast of CAISO Demand or fully accommodate a Priority Wheeling Through transaction, the CAISO will perform a post-HASP process to pro-rata allocate available transmission capacity between Load within the CAISO Balancing Authority Area and Priority Wheel Through transactions, as described in the Business Practice Manual. The pro-rata share of Load within the CAISO Balancing Authority Area will be based on the lower of each applicable Resource Adequacy Resource's Real-Time Energy Bid quantity or its shown Resource Adequacy Capacity. The Priority Wheeling Through pro-rata share for each Self-Schedule will be based on the lowest of (1) 110 percent of the submitted Day-Ahead Market Self-Schedule of the Priority Wheeling Through transaction, (2) the submitted Real-Time Market Self-Schedule of the Priority Wheeling Through transaction, or (3) the Priority Wheeling Through quantity requested 45-days in advance of the month. The available transmission capacity the CAISO awards to Priority Wheeling Through transactions in the post-HASP process cannot exceed the Priority Wheeling Through quantity the CAISO calculates in this pro-rata allocation. Energy scheduled via the post-HASP process will be settled as Exceptional~~

~~Dispatch Energy pursuant to Section 11.5.6.1, as applicable.~~

* * * * *

Appendix A

* * * * *

~~- **[Not Used] Priority Wheeling Through**~~

~~A Self-Schedule that is part of a Wheeling Through transaction consistent with Section 30.5.4 that is supported by (1) a firm power supply contract to serve an external Load Serving Entity's load throughout the calendar month and (2) monthly firm transmission the external Load Serving Entity has procured under applicable open access tariffs, or comparable transmission tariffs, for Hours Ending 07:00 through 22:00, Monday through Saturday excluding NERC holidays, from the source to a CAISO Scheduling Point.~~

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Attachment E – Draft Final Proposal

Transmission Service and Market Scheduling Priorities Initiative – Wheeling Through Priorities

California Independent System Operator Corporation

January 27, 2022



Transmission Service and Market Scheduling Priorities – Phase 1

Draft Final Proposal

December 10, 2021

Prepared by
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California Independent System Operator

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1 Introduction

The purpose of this initiative, previously named *External Load Forward Scheduling Rights Process*, is to explore development of a long-term, holistic, and durable, framework for establishing scheduling priorities in the CAISO market. The initiative also explores near-term enhancements to the current scheduling priorities framework that the CAISO can implement by summer of 2022.

Earlier this year, the CAISO undertook an expedited initiative – *Market Enhancements for Summer 2021 Readiness*, which evaluated market enhancements in preparation for expected stressed system conditions in summer 2021. Among other things, the CAISO established certain revised scheduling priorities for export, load, and wheel-through transactions in that initiative. Under that framework, which the CAISO implemented in early August 2021, wheel-through and export transactions must meet specific requirements to secure a scheduling priority equal to CAISO load. The wheeling through priorities the CAISO placed into effect are interim and will sunset on June 1, 2022. Within that same initiative, the CAISO committed to undertaking a new initiative to develop a holistic long-term framework for establishing scheduling priorities in the CAISO markets.

This initiative has two distinct, but simultaneously run, phases. Phase 1 focuses on near-term enhancements to the existing scheduling priorities framework that the CAISO can implement by summer 2022. Phase 2 focuses on developing a long-term holistic framework. The CAISO will conduct both phases concurrently with Phase 1 being presented to the CAISO Board of Governors in January 2021, and the stakeholder process for Phase 2 continuing beyond that.

This document represents the draft final proposal for Phase 1 of the initiative and identifies several transparency enhancements, while proposing to extend the wheeling-through scheduling priorities and associated framework for summer 2022 and summer of 2023. This document also contains further discussion and updates on Phase 2 of the initiative based on stakeholder comments submitted on the issue paper and working group discussions to date, including an updated schedule. But it does not provide a defined proposal at this time.

The CAISO will host a stakeholder meeting on December 20, 2021, to discuss the Phase 1 draft final proposal with stakeholder comments due on January 7, 2022.

2 Draft Final Proposal Summary

Phase 1 Draft Final Proposal

This section of the paper summarizes elements of the Phase 1 draft final proposal, which will be elaborated upon in later sections. The draft final proposal identifies proposals in two key areas: (1) transparency enhancements, and (2) scheduling priorities framework for summer 2022 and summer 2023. In order to support expedited resolution on Phase 1 of the initiative, and facilitate a presentation to the CAISO Board of Governors and EIM Governing Body in January 2022, along with a prompt FERC filing, this proposal is considered the draft final proposal.

After considering several substantive enhancements identified in the issue paper, the CAISO is proposing to extend the interim wheeling through scheduling priorities and the associated framework through summer 2022 and summer 2023, until June 1, 2024. More specifically, the CAISO proposes:

- *Extension of the current, interim, wheeling through scheduling priorities framework for summer 2022 and summer 2023* – the CAISO proposes to extend the current interim wheeling through market scheduling priorities, and the associated framework, to June 1, 2024. Extending these priorities for the next two summers will provide certainty as to the rules for wheeling through the system and allow the CAISO and its stakeholders to focus efforts on the development of a transmission reservation process for establishing scheduling priorities as part of Phase 2 of this initiative.
- *Enhancements to provide additional visibility of the non-RA capacity for a supporting resource as well as notifications when a high priority export (PT export) schedule exceeds the non-RA capacity of the supporting resource* – the CAISO proposes enhancements that will provide (1) further visibility on the non-RA capacity of a resource supporting a PT export schedule, and (2) enhancements that will notify the scheduling coordinator submitting the PT export schedules if and when the PT export schedules exceed the non-RA capacity of the supporting resource. These enhancements will enable the supporting resource and the parties submitting PT export schedules to communicate more effectively to submit PT export schedules that are within the limits of the supporting resource's non-RA capacity.
- *Clarification to tariff language regarding PT exports from Variable Energy Resources (VER)* – the CAISO proposes clarifying tariff language to address the concern that PT export schedules can be supported by VERs based on outdated output forecasts. The proposed tariff language clarifies that a VER's ability to support a PT export schedule for the entire hour is based upon the most recent output forecast applicable for the hour for which the bid was submitted.

The proposed transparency enhancements are consistent with those scope items identified in the issue paper. The CAISO proposes publication of additional requested data and information:

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- *Aggregate high priority wheel (Priority Wheeling Through) registration data* – completed. The CAISO published the data at the end of September, 2021, and the CAISO will update the document when additional new registrations are submitted and processed.¹
- *Aggregate Resource Adequacy (RA) import data* – in progress. The CAISO will make this available in the coming weeks. It will consist of historical RA import aggregate data per tie point, along with a going-forward publication of the same data based on the most recent monthly RA supply plan showings. Along with the Priority Wheeling Through registration data noted above, this information will provide market participants with additional visibility on commitments at different tie points.
- *Residual Unit Commitment (RUC) load forecast adjustments* – the CAISO will publish updated load forecasts utilized in RUC based on operator adjustments. This data will create improved situational awareness for adjoining balancing authorities and other market participants. Publication of this data requires further technology enhancements, which the CAISO will implement before next summer.
- *Curtailment data* – the CAISO will publish curtailment data on its Open Access Same Time Information System (OASIS) for wheeling through, export and load transactions to make this information available closer in time to when these curtailments occur. Publishing data requires further technology enhancements, which the CAISO will implement before next summer.

Within the category of transparency enhancements, the CAISO will also continue to work on consolidating terms and business requirements applicable to exports and wheels. The end product will be a singular guiding document – as an appendix to a business practice manual – that captures the relevant information that applies to exports and wheeling through transactions. This task includes review of terms to ensure consistency across the tariff, business practices, and the different systems/tools guiding documents. The CAISO will also develop a document, as suggested by stakeholders in comments to the issue paper, that identifies the different reports available that relate to wheeling and export data published by the CAISO currently, along with the location of those reports. In the issue paper, several additional items were scoped in for consideration, but for which the CAISO does not propose changes from the current framework in place.

¹ The data can be accessed on the CAISO website, on the “Reliability Requirements” webpage - <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=6ED737E1-677F-437A-873A-0BD2E4F8E764>

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The CAISO plans to take this item for decision to a special session, date not yet announced, of the CAISO Board of Governors in January 2022 to support an expedited filing with FERC and provide certainty of the rules ahead of the summer.

3 Initiative Background

Earlier this year, the CAISO conducted an expedited stakeholder initiative - *Market Enhancements for Summer 2021 Readiness*, which evaluated market enhancements in anticipation of challenging system conditions in summer 2021. This expedited initiative evaluated a number of topics, including enhancements to the scheduling priorities for load, export, and wheeling through transactions in the day-ahead and real-time market optimization processes and related market rules. FERC approved the proposed scheduling priorities in June, 2021.²

As part of the same expedited initiative, the CAISO committed to undertake a separate effort to develop a long-term, holistic, framework for establishing scheduling priorities in the market. The CAISO recognizes this is a critical issue for load serving entities internal and external to CAISO to use the CAISO system to wheel through or export power to serve their load, particularly in stressed system conditions.

Further compounding the need to move toward a more holistic and durable long-term framework for establishing scheduling priorities in CAISO's market are the evolving conditions across the western grid. Supply shortfalls in the CAISO and across the western interconnection³ are contributing to increased dependence on import generation to serve load reliably. The CAISO and much of the western interconnection are increasingly facing stressed grid conditions, often simultaneously, driven by a number of different factors.

The purpose of this initiative is to engage with stakeholders collaboratively and constructively to develop a holistic, long term framework of scheduling rights and priorities that will allow CAISO and regional entities to serve load reliably in light of the common challenges we face.

Phase 1 of the initiative focuses on enhancements and identification of a scheduling priorities framework for summer 2022, upon the expiration of the current interim wheeling through scheduling priorities at the end of May 2022. The CAISO recognizes the need to provide certainty regarding the rules for wheeling across its system as internal and external load

² *California Independent System Operator Corporation*, 175 FERC ¶61,245 (2021).

³ Western Electric Coordinating Council (WECC), *The Western Assessment of Resource Adequacy Report* (December 18, 2020).

<https://www.wecc.org/Administrative/Western%20Assessment%20of%20Resource%20Adequacy%20Report%2020201218.pdf>

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serving entities start planning and procurement for the upcoming summer. Phase 2 of the initiative focuses on the long-term, holistic, framework for establishing scheduling priorities and as CAISO indicated in the issue paper, the development of a transmission reservation process for establishing these priorities.

3.1 CAISO Markets and Role of Scheduling Priorities

The CAISO operates a wholesale day-ahead and real-time energy market. Supply offered into these markets, whether economically bid or self-scheduled⁴, is awarded and dispatched by the market based on economics. The CAISO does not require or provide for forward reservation of transmission service to participate in the market. Rather, the market optimizes all physically available transmission. This contrasts with the Open Access Transmission Tariff (OATT) paradigm prevalent across the west where buyers/sellers bilaterally secure capacity/energy and separately reserve transmission service in advance of the transaction, to support delivery of the transaction from source to sink.

Scheduling priorities in CAISO's market become a factor when the market cannot find a feasible solution. This occurs when there is insufficient supply to meet overall demand on the CAISO grid, including exports, or there are binding transmission constraints in the CAISO balancing authority area such that economic bids alone cannot resolve. The market adjustment process, which utilizes penalty price parameters⁵, adjusts import schedules and wheeling through transactions to apportion transmission capacity when the system is constrained and the CAISO is at risk of not serving its load. This is particularly important when, for example, an intertie is constrained in the import direction based on the scheduling limits or internal Path 26 is constrained in the north-south direction, in which case scheduling priorities dictate curtailment order of self-scheduled transactions for the market to solve and allocate limited transmission across transactions.

Under the framework that existed prior to August 4, 2021, a self-scheduled export potentially supported by resource adequacy (RA) capacity scheduled in the day-ahead market had a

⁴ A self-schedule is a market bid a scheduling coordinator submits to the CAISO that indicates a quantity in MWh but does not specify a price. This indicates the scheduling coordinator is a price-taker. Effectively, self-schedules are requests the market schedule the transaction irrespective of the market price.

⁵ The market software determines the priority order in which the various self-schedules are curtailed using market parameters known as "penalty prices." These penalty prices are set to specific values to (1) determine the conditions under which the market may relax a constraint or curtail a self-schedule, and (2) establish the market prices when these events happen.

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higher priority than CAISO load in the real-time market. This created the possibility the market would use RA capacity intended to serve CAISO internal load to instead support the export transaction. Moreover, the tariff did not specify scheduling priorities for wheeling through transactions. However, the market software effectively provided wheeling through self-schedules that clear the day-ahead market a higher priority than CAISO load. In stressed conditions when there may be binding intertie constraints, wheeling through self-schedules could displace RA imports serving CAISO load based on the higher scheduling priority.

The CAISO replaced the scheduling priority framework described above with the scheduling priority framework that emerged out of the *Market Enhancements for Summer 2021 Readiness*⁶ initiative. The provisions the CAISO implemented in August are described further below.

3.2 Current Scheduling Priorities Framework

Following the historic heat wave in mid-August 2020, which caused energy supply shortages across the CAISO and led to controlled rotating power outages on the system, the CAISO, California Public Utilities Commission (CPUC), and the California Energy Commission (CEC) published a root cause analysis of the events⁷. Subsequently, the CAISO launched an expedited stakeholder initiative, titled *Market Enhancements for Summer 2021 Readiness*, to consider market enhancements necessary to prepare for potential extreme weather events and tight supply conditions in summer 2021. One of the initiative elements evaluated was enhancements to the load, export, and wheeling through scheduling priorities in the market. Scheduling priorities are effectuated by use of penalty prices in the CAISO market software. These penalty prices are set to specific values to (1) determine the conditions under which the market may relax a constraint or curtail a self-schedule and (2) establish the market prices when these events happen. A higher magnitude of penalty price indicates a higher scheduling priority. The CAISO and stakeholders put in painstaking effort during the discussion to address the complex, challenging and polarizing issue of scheduling priorities.

Through the initiative, the CAISO proposed substantive enhancements to the scheduling priorities framework, including:

⁶ California Independent System Operator, *Market Enhancements for Summer 2021 Readiness* initiative. <https://stakeholdercenter.caiso.com/StakeholderInitiatives/Market-enhancements-for-summer-2021-readiness>

⁷ California Independent System Operator, California Public Utilities Commission, California Energy Commission, *Final Root Cause Analysis: Mid-August 2020 Extreme Heat Wave* (January 13, 2021). <http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf>

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- Exports supported by non-RA capacity, *i.e.*, high priority PT exports, will have equal priority to CAISO load, and a higher priority than exports not specifically supported by non-RA capacity, *i.e.*, LPT exports.
- LPT exports will have lower priority than CAISO load.
- Establishing explicit priorities for wheeling through transactions:
 - Non-Priority Wheeling Through (LPT wheels) transactions – have lower priority, equal to LPT exports.
 - Priority Wheeling Through transaction – have a priority equal to CAISO load and PT exports, and higher priority than LPT wheels and LPT exports.

FERC approved⁸ the proposed enhancements on June 25, 2021 and CAISO implemented them on August 4, 2021. These priorities are wheeling through priorities are interim and expire June 1, 2022.

Exports qualify for PT export status by designating a supporting resource's non-RA capacity and ensuring that a load serving entity external to the CAISO has rights to the capacity. Wheeling through transactions can qualify for PT wheel status if the scheduling coordinator notifies the CAISO at least 45 days before the month of the quantity of the wheel supported by a power supply contract to serve an external LSE's load for the entire calendar month, and attesting that appropriate firm transmission has been secured to the CAISO border.

High priority transactions - PT exports, Priority Wheeling Through, and CAISO load - have equal scheduling priority. To implement this scheduling priorities framework, the CAISO conducts a post-Hour Ahead Scheduling Process (post-HASP) process to allocate available transmission capacity between supply needed to meet CAISO load and Priority Wheeling Through transactions on a *pro rata*⁹ basis if an intertie scheduling point is constrained in the import direction or Path 26 is congested in the north-south direction and CAISO cannot meet forecast demand or fully accommodate a Priority Wheeling Through transaction.

4 Draft Final Proposal: Phase 1 Enhancements by Summer 2022

This section describes further in detail the different elements of the draft final proposal in the two overarching categories of topics: (1) transparency enhancements, and (2) extending the

⁸ *California Independent System Operator Corporation*, 175 FERC ¶61,245 (2021).

⁹ In determining *pro rata* allocations, the CAISO load share is the sum of the lower of each applicable RA resource's real-time energy bid quantity or its shown RA capacity. The Priority Wheeling Through self-schedule *pro rata* share is the sum of the lower of the following quantities for each self-schedule: (1) 110 percent of the submitted day-ahead market self-schedule of the Priority Wheeling Through transaction; (2) the submitted real-time market self-schedule of the Priority Wheeling Through transaction; or (3) the Priority Wheeling Through quantity requested 45-days in advance of the month.

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existing interim framework approved by FERC in June 2021. The sections below also provide further detail and explanation on topics that the CAISO noted as in-scope in the issue paper, but ultimately does not propose changes on those topics.

The CAISO plans on presenting this proposal to a CAISO Board of Governors and EIM Governing Body special session in January 2022 in order to expedite a FERC filing and providing certainty of the rules for wheeling through the CAISO's system ahead of next summer.

4.1 Proposal - Market Scheduling Priorities

In this section, the CAISO describes its proposal to extend the interim wheeling through scheduling priorities framework that was approved by FERC for summer 2021. Additionally, this section describes enhancements, clarifications and/or direction on other scope items identified in the issue paper.

4.1.1 Wheeling Through Scheduling Priorities

The CAISO proposes to extend the interim wheeling through scheduling priorities framework approved by FERC, which expire on June 1, 2022, through the summer 2022 and summer 2023, until June 1, 2024.

Extending the FERC-approved interim scheduling priorities framework provides certainty as to the rules and requirements for wheeling across the CAISO system. Entities outside the CAISO BAA have expressed that they need certainty in advance of the rules that will be in-place so that they can make contractual arrangements to serve their own load and ensure their own reliability. At the same time, extension of the framework provides protections for serving native load compared to the framework in place prior to summer 2021.

Moreover, extending the existing framework for the next two summers will permit the CAISO and stakeholders to focus their efforts on the developing a long-term transmission reservation process for establishing market scheduling priorities under Phase 2 of this initiative.

By extending the interim wheeling through scheduling priorities framework, parties wheeling through the CAISO will continue to be able to establish scheduling priority equal to CAISO load – Priority Wheeling Through - by registering a wheeling through transaction at least 45 days ahead of the month and meeting the associated requirements.¹⁰ Wheeling through

¹⁰ Under the interim rules the CAISO proposes to extend Priority Wheeling Through customers must demonstrate their wheeling through transaction is supported by (1) a firm power supply contract to serve an external LSE's

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transactions that do not register at least 45 days ahead of the month will continue to be considered low priority wheeling through (LPT wheel) transactions and will have a lower scheduling priority than Priority Wheeling Through transactions in accordance with the priorities described in CAISO's tariff and approved by FERC last summer.¹¹

In comments on the issue paper, numerous stakeholders shared their perspectives and recommendations on the wheeling through priorities approach for summer 2022. The *Joint California LSEs* expressed disappointment that the CAISO did not believe it could implement their suggested framework by next summer and thus excluded it from the scope for Phase 1. The CPUC proposed that the CAISO cap the amount of wheeling through transactions that can register 45 days in advance and establish a wheeling through priority equal to load. Alternatively, the CPUC stated that the CAISO should seek to extend the existing framework should FERC reject such proposal. On the other hand, *NV Energy* and *Salt River Project (SRP)* recommended that the CAISO promptly extend the current wheeling priorities framework for summer 2022 because it would provide certainty regarding the rules for external entities to establish scheduling priority for wheeling through transactions across the CAISO system for next summer as they plan for summer operations.

In evaluating these stakeholder comments, the CAISO considered different approaches and the viability of adequately vetting substantive changes in the wheeling priority framework with stakeholders in time to be in-place when the current interim rules expire on June 1, 2022. Regarding the CPUC suggestion, the CAISO is concerned that any MW cap on the amount of wheel through transactions that can establish scheduling priority based on the prior's summer registrations would be arbitrary and difficult to justify. It is important to remember that to establish a wheeling through priority equal to load, a wheeling through customer must establish that priority at least 45 days in advance of the month, must have a contract in place to serve load, and must have firm transmission in place to the CAISO system 45 days in advance for the entirety of the month in which they are establishing the priority. These requirements affect the volume of wheeling through transactions that can establish the priority. In August 2021 there were 1021 MW of wheeling through transactions registered and receiving high priority status equal to load, and that amount decreased to 687 MW registered for September 2021. Further, these registered wheeling through transactions were not exclusively concentrated from north to south across the CAISO system, but also included wheels through the southern portion of the CAISO system and across a variety of points. For example, the

load throughout the calendar month, and (2) and monthly firm transmission from the source to the CAISO border for Hours Ending 07:00 through 22:00, Monday through Saturday excluding North American Electric Reliability Corporation (NERC) holidays. CAISO Tariff, Appendix A – Definition of Priority Wheeling Through.

¹¹ CAISO Tariff, section 31.4 (2020).

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highest amount of wheels registered and establishing Priority Wheeling Through status was 279 MW, across the import point Malin500.

The CAISO is mindful that any changes to the interim wheeling scheduling priorities framework for summer 2022 would introduce significant uncertainty regarding the rules and requirements for establishing priority across the CAISO system right before the start of the summer. External entities, similar to the CAISO LSEs, start planning for the next summer's operations at the conclusion of the prior summer. This includes contracting for generation that may need to wheel across the CAISO to maintain summer reliability on their system. The CAISO appreciates the need for certainty of the rules regarding wheeling through priorities ahead of next summer as entities across the west start planning their resource portfolios and summer operations.

The CAISO also considered deriving an amount of transmission capacity that could be made available for wheeling through transactions to establish priority - effectively Available Transfer Capability (ATC) - in the month ahead and seasonal timeframes, as well as closer in time. The CAISO would derive these values based on assumptions made across the different time horizons considering the total transfer capability across a tie point and transmission capacity needed across that tie path to meet native load needs, and ultimately the CAISO would derive an amount that market participants could reserve to establish scheduling priority for wheeling through transactions. However, such an approach requires extensive vetting with stakeholders regarding the assumptions utilized, particularly the assumptions for deriving native load needs. There are different inputs and assumptions that can inform that amount. In addition, the CAISO would have to identify a viable method for accessing and reserving that transmission for wheeling transactions. The CAISO cannot adequately vet or implement such an approach by next summer. The CAISO will evaluate this type of an approach to deriving native load needs, different margins, and ultimately the transmission capacity that can be made available for reservation, along with an access or allocation process, as part of Phase 2 of this initiative.

In comments on the issue paper, the *CPUC* and the *Joint California LSEs* also requested that the CAISO consider Reliability Must Run (RMR) and Capacity Procurement Mechanism (CPM) designations within the post-HASP allocation process, affording it priority with RA imports. The parties note that these designations are procured and paid for by California customers and are effectively resource adequacy resources. The CAISO reiterates that under the current tariff provisions, approved by FERC as part of the interim wheeling through scheduling priorities framework for summer 2021, the post-HASP allocation process affords priority to RA Capacity¹², which the CAISO tariff defines as supply capacity listed on a Resource Adequacy Plan and a Supply Plan. CPM designated capacity and RMR capacity do not meet the tariff

¹² CAISO tariff section 34.12.3.

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definition of RA Capacity and thus are not afforded the priority in the post-HASP process. Extending the interim wheeling through priorities and associated framework also extends, and does not modify, the application of the post-HASP process approved by FERC.

The proposed extension of the interim wheeling through scheduling priorities, to June 1, 2024, will permit the CAISO and stakeholders to focus their efforts on developing a transmission reservation process for establishing market scheduling priorities as considered in Phase 2 of this initiative. The CAISO considered an extension for summer 2022 only, however, the CAISO and stakeholders would need to complete the policy process for the long-term framework by the start of summer 2022 and file it with FERC soon thereafter in order to provide certainty regarding the applicable rules as LSEs start planning for summer 2023. Any delay in completing the policy design of a long-term framework and the associated FERC filing, or any uncertainty or delays in implementation, in the timeframe noted above, would again add uncertainty as to the framework for the following summer and add uncertainty to contracting as LSEs across the region plan for summer operations. The CAISO will seek to complete Phase 2 of the initiative and finalize policy development by the end of 2022 in order to allow time for timely implementation. The CAISO aims to provide certainty regarding rules for wheeling through the CAISO well in advance of summer 2024. As the CAISO and stakeholders vet and develop the transmission reservation process and its various components, there will also be ample opportunity to identify connections and dependencies with other processes and policies based upon the complexity of the reservation process.

4.1.2 High Priority Export Enhancements

Under current processes, the CAISO can de-prioritize a self-scheduled high priority export (PT export) to low priority status (LPT exports) if the sum of PT export schedules exceeds the non-RA capacity of the designated supporting resource. Although these de-prioritizations are infrequent, they generally occur when a scheduling coordinator submits a PT export schedule at the open of the market but fails to update the schedule prior to market close in response to changed conditions, or there is a lack of adequate communication between the scheduling coordinator for the supporting resource and the scheduling coordinator(s) submitting the PT export schedules.

The CAISO proposes technology enhancements to improve the awareness for the scheduling coordinator regarding the instantaneous non-RA capacity of the supporting resource, as well as enhancements to notify scheduling coordinators submitting PT export schedules when their schedules exceed the non-RA capacity of the supporting resource. Specifically, the CAISO proposes the following:

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- (1) Enhancements to the Scheduling Infrastructure Business Rules (SIBR) system that provide a scheduling coordinator for a designated supporting resource with the ability to view the instantaneous non-RA capacity of the resource; and
- (2) Enhancements to the SIBR system to provide scheduling coordinators submitting PT export schedules with a notification warning when they submit PT export schedules that exceed the non-RA capacity of the supporting resource.

These enhancements improve awareness of resource availability and a resource's ability to support PT exports, enabling further communication between parties and ultimately avoiding submission of PT export schedules that exceed the non-RA capacity of the supporting resource.

First, the CAISO proposes to develop SIBR functionality that allows the scheduling coordinator of the supporting resource to view the instantaneous non-RA capacity of the resource based upon the different offers and awards in the market. This functionality could enable the scheduling coordinator of the supporting resource to communicate more effectively the non-RA capacity of the resource with parties designating the resource as supporting a PT export.¹³ Current functionality notifies the scheduling coordinator of the supporting resource that its resource has been identified as supporting a PT export schedule whenever a PT export schedule is submitted or modified. Combined with the functionality to enable viewing the instantaneous non-RA capacity, the scheduling coordinator for the supporting resource will be able to communicate more effectively with parties submitting export schedules.

Second, the CAISO proposes enhancements to notify all scheduling coordinators submitting PT export schedules with the same supporting resource when the sum of PT export schedules exceeds the non-RA capacity of that resource. The CAISO will issue this notification based upon the submission of PT export schedules, prior to market close, to enable parties to adjust the schedules or further communicate with the scheduling coordinator of the supporting resource to determine potential adjustments to these schedules and appropriate distribution of the non-RA capacity associated with the resource. This enhancement should also limit or mitigate instances of parties submitting PT export schedules that exceed the non-RA capacity of the designated supporting resource.

In the issue paper, the CAISO noted it would evaluate potentially adjusting PT export schedules to the non-RA capacity of the resource, pro-rata or otherwise, when the sum of schedules exceeds the non-RA capacity. The CAISO does not propose at this time any

¹³ However, consistent with current functionality, SIBR does not use outage information to calculate non-RA capacity, to the extent the resource is under a partial outage. If the resource is under an outage, the Scheduling Coordinator for the resource should submit an energy bid which is consistent with the availability of the resource, so that SIBR can derive the non-RA capacity for the resource

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adjustments to PT export schedules if these exceed the non-RA capacity of the supporting resource. Rather, the CAISO will retain the current framework of de-prioritizing all PT export schedules to LPT export status if this occurs. The CAISO is not a party to, or privy to, the contractual arrangements of the supporting resource and the parties submitting PT export schedules; thus, any adjustments made by the CAISO to decrease PT export schedules pro-rata or otherwise to the non-RA capacity may not reflect contractual arrangements parties have. Furthermore, the CAISO does not make similar adjustments to schedules in other aspects of the market. It is the responsibility and role of scheduling coordinators to submit offers into the market based on their business needs and the contractual arrangements they have in place. The CAISO's proposed enhancements provide the scheduling coordinator of the supporting resource, and the scheduling coordinator submitting the PT export schedule, the necessary tools to create awareness of the non-RA capacity and notifications allowing parties to further coordinate and ensure submission of schedules commensurate with contractual arrangements that may be in place. These enhancements should significantly limit the instances when PT export schedules exceed the non-RA capacity.

4.1.3 Underproduction of Resources Supporting PT Exports

Through various comments submitted in both in the *Market Enhancements for Summer 2021 Readiness* initiative and the current initiative, the *Joint California LSEs* requested that the CAISO consider enhancements that would allow curtailment of PT export schedules if the resource designated as supporting the export is under-producing. The CAISO included this topic in scope for Phase 1 of this initiative for further evaluation and consideration. In its comments on the issue paper, the *Department of Market Monitoring (DMM)* further suggested that the CAISO consider curtailing PT export schedules ahead of load in stressed system conditions. DMM maintained this is similar to the prevailing practice across the west.

The *DMM* noted examples of variable energy resources (VERs) supporting PT exports, from August 2021, when their output was significantly less than the PT export schedule. The *DMM* noted that under the current tariff rules, the scheduling coordinator of the VER supporting resource attests that the resource is capable of producing up to the level of the PT export schedule at the time of bid submission,¹⁴ which depending upon when the bid is submitted, could be different than the actual capabilities of the resource based on the latest output forecast. For example, the Scheduling Coordinator for a resource might submit its bid into real-time market the day before, after the close of day ahead market, but the real-time forecast for the resource might be significantly different. Finally, the *DMM* suggested that the CAISO

¹⁴ Tariff section 30.5.1(aa).

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develop functionality to notify the scheduling coordinator of the supporting resource that its resource has been designated as supporting a PT export schedule.

Section 30.5.1(aa) of the CAISO tariff currently states:

The Scheduling Coordinator for the designated resource and the Scheduling Coordinator for the export Self-Schedule shall designate a resource to support such export only if the resource is expected to have sufficient available capacity to support the export quantity throughout the entire hour. For Variable Energy Resources, this requirement can only be satisfied if the resource's forecasted output for each of the applicable four (4) fifteen (15) minute intervals at the time of bid submission is for Generation that is equal to or greater than the Self Schedule export quantity.

The CAISO agrees with DMM that the existing tariff language does not sufficiently address the situation where a Scheduling Coordinator for a VER supporting a PT export submits a bid based on the then-current forecast, but the forecast subsequently changes prior to the real-time market for which the bid was submitted, and the resource's newly forecasted output for each of the applicable four (4) fifteen (15) intervals is for generation less than the self-schedule export quantity. A scheduling coordinator for a VER should not be able to satisfy the intent of tariff section 30.5.1 by submitting an "early" bid and relying on a (stale) forecast that subsequently is updated and revised before real-time. A scheduling coordinator for a VER should be attesting to the ability of the VER to support the PT export based on the most recent forecast available that applies to the real-time interval(s) for which the bid was submitted. In other words, the Scheduling Coordinator should be obligated to update its schedule if the forecast conditions change ahead of market close. If the VER forecast changes prior to real-time market close such that the VER can no longer support the initial PT export schedule quantity, the scheduling coordinator should be expected to update the PT export schedule to an amount the resource can support based on the most recent forecast. For example, if a scheduling coordinator submits a PT export schedule supported by a VER, into the real-time market at the close of the day ahead market (*i.e.*, on the day prior), the scheduling coordinator should update or modify that PT export schedule prior to real-time market close if there are changes to the VER output forecast such that the resource can no longer support the originally submitted PT export amount for the entirety of the hour. The CAISO anticipates proposing a modification along the following lines to the second sentence in the excerpt from Tariff section 30.5.1 (aa) above: "*For Variable Energy Resources, this requirement can only be satisfied if, based on the most recent forecast, the resource's forecasted output for each of the applicable four (4) fifteen (15) minute intervals in the applicable hour for which a bid has been submitted is for Generation that is equal to or greater than the Self Schedule export quantity.*"

Regarding DMM's suggestion that the CAISO develop market functionality to notify the scheduling coordinator for the supporting resource that its resource has been designated as

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supporting a PT export schedule, the CAISO takes this opportunity to clarify its current practice for notifications. Under current functionality, when a PT export schedule is submitted or otherwise modified, the scheduling coordinator for the identified supporting resource receives a notification that its resource has been identified as supporting a PT export. Following such notification, under tariff section 30.5.1(aa), the scheduling coordinator for the supporting resource has an obligation to notify the CAISO if it does not have a contractual commitment to support the PT export self-schedule or does not have a reasonable expectation to be available to support the self-schedule.

The CAISO declines to adopt the suggested proposal to reduce PT exports, before load, in stressed system conditions when the supporting resource is under-producing. Stakeholder suggestions to adopt such proposal appear to be based on the perception that this is the common practice across the western interconnection. However, the current practice prevalent across the west is to continue to support the export, even in stressed system conditions, to avoid adversely affecting the reliability conditions of the receiving balancing authority area. Moreover, a resource that is under-producing compared to the sum of its transmission schedules, including exports, is subject to energy imbalance charges. If a resource is offline, and an export transmission schedule is submitted from such resource, the CAISO will curtail the schedule. This is consistent with the *Idaho Power Company* presentation made earlier in the year during the CAISO's *Market Enhancements for Summer 2021 Readiness* workshop.¹⁵

Although resources are dispatched differently to support exports in the CAISO's markets than in the Open Access Transmission Tariff (OATT) framework, the CAISO's current practice for treating export schedules when the underlying resource is under-producing is not inconsistent with the practice of other western balancing authority areas. In CAISO's market, the export schedule is not dependent on the output level of the designated supporting resource because the market optimizes which resources to dispatch to meet the different transactions offered and to serve load. In stressed system conditions, the CAISO carries contingency reserves to cover generation that becomes unavailable in real-time, and the CAISO would curtail PT export schedules on a pro-rata basis with load when there is a risk of shedding load regardless of the production level of the identified supporting resource.

Regarding VER resources, if the resource is under producing because external conditions are different than forecasted when the schedules were accepted for the hour, the reduced output will be reflected in the following hour's forecast, and the resource would only be able to submit a lower PT export quantity for the following hour commensurate with the updated forecasted

¹⁵ Idaho Power Company, Presentation on *Market Enhancements for Summer 2021 Readiness*, page 10 (January 12, 2021). <http://www.caiso.com/InitiativeDocuments/IdahoPowerPresentation-MarketEnhancements-Summer2021Readiness-Jan122021Workshop.pdf>

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output conditions they can support. Adopting a proposal that curtails PT export schedules before load when the supporting resource is under-producing, along with nuanced consideration of under-performance thresholds to trigger curtailment of PT exports ahead of load, would not follow practices across the west and the treatment of exports from western balancing authority areas that are procured by LSEs as imports into the CAISO.

4.1.4 Curtailment Timing and Tagging Requirements

In the issue paper, the CAISO scoped into the initiative consideration of stakeholder suggestions on tagging requirements and curtailment timing in order to maximize use of physically available transmission.¹⁶ *Powerex* suggested requiring all high priority transactions (PT exports and RA imports) to submit a day-ahead E-Tag that would ensure when the CAISO is conducting post-HASP adjustments it does so on tagged transactions. Similarly, *Shell* suggested waiting until T-20 (20 minutes before flow) to conduct any necessary adjustments to schedules.

In comments on the issue paper, the *DMM*, *Joint California LSEs*, the *CPUC*, and *Shell* opposed the concept of requiring RA import transactions to submit E-Tags in the day ahead timeframe. Several of these parties noted that such a requirement would affect RA import requirements and modify the nature of RA import contracts to require E-Tags – source identification and transmission – in the day ahead timeframe. They stated that this initiative is not the place to consider such changes to the RA import requirements. *Shell* noted that although submitting E-Tags in the day ahead timeframe may be a common practice, it is not a transmission provider requirement across the west and by requiring such submission across the CAISO system may have unintended consequences.

The CAISO will not propose changes in tagging requirements. The CAISO agrees that requiring RA imports to submit E-Tags in the day ahead timeframe has implications that go beyond the scope of this initiative. For example, it affects the requirements and quality of imports under the RA program. Although the CAISO appreciates and recognizes the benefits that a day ahead E-Tag may provide – namely identifying the source of the import and the full transmission path know in the day ahead timeframe – this matter is more appropriately addressed through the CPUC resource adequacy proceedings and the CAISO resource adequacy initiative. As *Shell* noted in its comments, although submitting day ahead E-Tags is a common practice of other transmission providers in the west, it is not a requirement. Parties

¹⁶ California Independent System Operator, *Issue Paper: External Load Forward Scheduling Rights Process*, section 4.2.2.1 (August 31, 2021). <http://www.aiso.com/InitiativeDocuments/IssuePaper-ExternalLoadForwardSchedulingRightsProcess.pdf>

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ultimately have until 20 minutes prior to the hour of flow to finalize E-tag submissions, regardless of whether they submit an E-tag the day prior. Similarly, *Shell's* suggestion of waiting until T-20 (20 minutes prior to flow) to make schedule adjustments is incompatible with aspects of CAISO markets where actions need to be taken earlier to ensure the market can solve. Based on practical implications of such an approach, the CAISO and affected parties may have little time to make alternate arrangements if waiting until such a late timeframe to issue schedule adjustments.

The CAISO considered potential alternative approaches such as (1) considering only tagged transactions in the post-HASP adjustments process or (2) reinstating transactions after the tagging deadline (transmission profile) at T-40 minutes. But such approaches raise different challenges and equity issues. For example, considering only transactions with E-Tags in the post-HASP adjustment process (which takes place at T-60 minutes) would be challenging because this is ahead of a T-40 minute tagging deadline (for submission of transmission profile), and RA transactions without an E-Tag could be adjusted ahead of those with E-Tags even though the parties have additional time to submit those E-Tags under the tariff. This would effectively create a new sub-priority of PT wheeling through transactions and RA imports without E-tags vs. those with E-tags in the post-HASP process. Such an approach could also adversely affect RA import transactions which, based on the different contractual arrangements, may still need the additional time (the 20 minutes between the T-60 post-HASP process and the T-40 deadline to submit the E-tag transmission profile) up to the tagging deadline to complete the E-Tags submission. Due to the policy implications noted above, along with associated implementation challenges, the CAISO does not believe such an approach to be prudent.

Separately, the CAISO also considered an approach where it could reinstate transactions if PT wheels or RA imports ultimately did not submit an E-Tag with a transmission profile by T-40. However, such a process would require significant changes to systems, and the CAISO could not implement them by next summer. It also raises questions regarding the method of reinstating transactions in light of other processes that are ongoing and the practicality of reinstating transactions that may no longer be available because parties made alternate arrangements following a curtailment.

In spring of 2021, the CAISO implemented the settlement intertie deviation penalty structure intended to incentivize timely submission of E-tags and delivery of awarded imports. Import transactions that do not submit an E-Tag with a transmission profile by T-40 (or do not tag up to the awarded amount) are subject to a sizeable penalty - 75% of the higher of the real-time dispatch or fifteen minute market locational marginal price.¹⁷ Because the CAISO has only

¹⁷ CAISO Tariff, section 11.31.2 (2020).

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recently implemented this penalty structure, the CAISO believes it is important to allow time for the penalty structure to function and see if it has the desired effect of incentivizing timely tagging and delivery of import transactions. The CAISO will monitor the application of the intertie deviation settlement penalty and its effectiveness in incentivizing timely tagging by the established deadlines and delivery of imports, and it will consider whether different changes are necessary to import tagging requirements based on that monitoring.

4.2 Transparency Enhancements

The CAISO remains committed to providing the transparency enhancements suggested by stakeholders and identified in the issue paper. These enhancements, through the provision of important information and data, will help inform market participant decisions and strategies for wheeling through the CAISO system. Other enhancements will create improved situational awareness of conditions on the CAISO system and help inform potential risk of curtailment. In comments to the issue paper, stakeholders continued to support the additional data and information elements.

In late September, the CAISO published a document sharing aggregate data on registrations of Priority Wheeling Through transactions (PT wheels) across the system.¹⁸ The document identifies the aggregate MW of Priority Wheeling Through registrations, at different import/export points, by month. The CAISO updates the document with every new registration following a validation process to ensure that the proper requirements have been met.

In the issue paper, in response to stakeholder requests, the CAISO also committed to provide data on resource adequacy imports shown at different tie points based on monthly resource adequacy plans. The CAISO plans to publish historical data on RA import showings. The data would identify the aggregate MW of RA imports shown at each tie point based on monthly RA plans for the last eighteen (18) months. The CAISO will also supplement that document based on the most recent RA monthly showings and aggregate the MW amounts shown at each tie point. This information, along with the Priority Wheeling Through data and other data that is already publicly available, can help market participants evaluate the level of usage and commitments at different tie points to inform import or wheeling through practices across the CAISO system. The CAISO anticipates providing this information in similar format as the Priority Wheeling Through data – via excel spreadsheet – to facilitate easier querying and comparison of data. Once the information is published, or ahead of publication, if stakeholders have suggestions on the particular format of the data, the CAISO is open to suggestions.

¹⁸ *Priority Wheeling Through Transactions Data*, accessed at <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=6ED737E1-677F-437A-873A-0BD2E4F8E764>.

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The CAISO will publish operator adjusted load forecasts utilized in the Residual Unit Commitment (RUC) process. Stakeholders requested this information in comments leading up to the issue paper and the CAISO included this item within the scope of the initiative, particularly for any technology enhancements that may be needed in order to publish this information. As described in the issue paper,¹⁹ currently the CAISO publishes the Day Ahead Market load forecast, but operator adjusted load forecast information utilized in RUC is not published. The CAISO intends to publish the operator adjusted RUC load forecast on OASIS, which will require technology enhancements.

The CAISO will publish curtailment data and information on wheeling through transactions, exports and load on OASIS, promptly after those curtailments have been issued. This includes curtailment data that may occur in the post-HASP process. The information was requested by stakeholders in comments to the July 13th stakeholder workshop, and the CAISO subsequently included it within the scope of this initiative. Currently, much of the information about curtailments is made available through after-the-fact reports, rather than soon after the curtailment event, and these reports have been identified in the issue paper.²⁰ The CAISO will delineate and include the technology enhancements needed to support publication of this information on OASIS.

The CAISO will also continue to work on developing a guide document that consolidates export and wheeling through business practice requirements into an addendum to a business practice to have a singular location that identifies relevant practices, as described in the issue paper.²¹ In conjunction, the CAISO will review terms across the tariff, business practices, and relevant systems guide documents to ensure consistent use of terminology as it relates to establishing export and wheeling through priorities. The business practice addendum will follow the CAISO business practice process ahead of the summer.

Finally, in comments received to the issue paper, *Shell* recommended the CAISO publish a one page “fact sheet” that identifies relevant existing reports and transparency additions, along with their location. This fact sheet would be a simple reference document that can create awareness of different reports and data publicly available that is relevant for market participants wheeling through or exporting from the CAISO system. The CAISO will work to publish this suggested fact sheet promptly and announce its publication via market notice.

¹⁹ California Independent System Operator, *Issue Paper: External Load Forward Scheduling Rights Process*, section 4.1.4 (August 31, 2021). <http://www.caiso.com/InitiativeDocuments/IssuePaper-ExternalLoadForwardSchedulingRightsProcess.pdf>

²⁰ *Id.*, section 4.1.2.

²¹ *Id.*, section 4.1.1

4.2.1 *Miscellaneous*

In the issue paper, the CAISO also included consideration of *Silicon Valley Power (SVP)* comments suggesting a definitional clarification in the tariff regarding the use of the term “CAISO Load” which was included in the summer tariff filing as part of section 34.12.3 discussing proration of transmission capacity between “CAISO Load and Priority Wheel Through Transactions.” In its comments, *SVP* noted that the tariff includes definition of the term “CAISO Demand” but does not explicitly define the term “CAISO Load” which is capitalized in the context of the relevant tariff section. *SVP* suggested defining the term as – “CAISO Load” or, alternatively, replacing “CAISO Load” in that sentence with the phrase “Load within the CAISO Balancing Authority Area.”

The CAISO recognizes that the term “Load” is defined in the tariff. For clarity, the CAISO recommends replacing the term “CAISO Load” in that section with the phrase “Load within the CAISO Balancing Authority Area” to avoid confusion, as *SVP* suggests. This clarification will be made as part of a future tariff filing in Phase 1 and will be part of draft tariff language subject to stakeholder comment and review.

5 Additional Information in Response to Stakeholder Requests & Questions

This section of the draft final proposal responds to clarifying questions some stakeholders raised in their comments to the issue paper.

In their comments on the issue paper, *Powerex* seeks clarification whether the CAISO will pursue a framework for wheeling through service comparable to how wheeling-through service is provided over external transmission systems or a framework that considers the type of arrangements on other transmission systems in determining the type of priority the transactions gets across CAISO’s system (or the priority on CAISO’s system derives the level of priority across other systems). The CAISO addressed this question in the issue paper, but reiterates that the intent of Phase 2 of the initiative is to develop a transmission reservation process that provides wheeling-through service and priority across the CAISO system in a manner comparable to that offered by transmission providers across the west. Considering the type of transmission service secured across other transmission systems in determining the priority afforded across the CAISO system would not be consistent with FERC guidance or the practices of other transmission providers under their OATTs. A party securing transmission across a system does so based on the terms and conditions of the tariff applicable to that particular transmission system, and it is able to evaluate the risks of different types of

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transmission products and/or priorities considering costs and other factors. Each balancing authority area considers the priority established across its own system when taking reliability based actions on such transactions. Other ISOs/RTOs do not consider the type of arrangements on other systems when determining whether to take action on transactions across their system. They focus squarely on the type of transmission or priority established across their own system.

The *Salt River Project (SRP)* requested a clarification regarding the market provisions that give low-priority wheeling self-schedules initially scheduled in the day-ahead market a higher real-time market scheduling priority than low-priority wheeling self-schedules initially scheduled in the real-time market. *SRP* asked if this higher priority is for a wheel's integrated forward market schedule, or only for the wheel's residual unit commitment process schedule if it is less than the integrated forward market schedule. The CAISO clarifies that a low-priority wheeling self-schedule initially scheduled in the day-ahead market only has a higher priority for the amount of its residual unit commitment process schedule than new real-time market low-priority wheeling self-schedules.

SRP also asked the CAISO to explain the rationale for the change resulting from the *Market Enhancements for Summer 2021* stakeholder initiative that gave exports not specifically supported by non-resource adequacy capacity a lower scheduling priority in the real-time market than CAISO load even if the export has a residual unit commitment process schedule.²² The CAISO explained in its transmittal letter to FERC for the tariff amendment to implement this change that the day-ahead market's RUC cannot preclude capacity procured by CAISO load serving entities under their resource adequacy requirements from backing exports.²³ The CAISO also explained that despite there being sufficient supply in the residual unit commitment process to back these exports, supply may tighten in real-time and this capacity under resource adequacy contracts may be needed to meet CAISO load.

6 Phase 2: Long-Term Framework for Establishing Scheduling Priorities – Transmission Service Reservation Process

As noted in the Phase 1 straw proposal described earlier in this document, the CAISO hopes that extensions of the existing wheeling through interim scheduling priorities framework for next summer will permit the CAISO and stakeholders to focus their attention on the

²² CAIOS load and exports specifically supported by non-resource adequacy capacity have the same real-time market scheduling priority.

²³ <http://www.aiso.com/Documents/Apr28-2021-Tariff-Amendment-Load-Exports-and-Wheeling-Tariff-Amendment-ER21-1790.pdf> pages 32-33

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development of a long term framework for establishing scheduling priority across the CAISO system. This phase focuses on the development of a transmission reservation process for establishing scheduling priority on the CAISO system.

To that end, in section 8 of this draft final proposal, the CAISO shares an updated schedule for Phase 2 that will target developing a transmission reservation process framework by end of 2022 in order to allow time for robust implementation and providing sufficient notice for parties on the rules for wheeling through the CAISO system to inform contracting ahead of summer 2024, and allow for reservations of transmission for summer 2024. This timeline may permit for implementation ahead of summer 2024 depending upon the complexity of the transmission reservation process and implementation, along with potential consideration of a transition process to the new framework.

6.1.1 Issue Paper Stakeholder Comments

Focusing briefly on the issue paper, stakeholder comments continued to support development of a transmission reservation process for establishing scheduling priorities in the market. The *Joint California LSEs* continued to support establishing a transmission reservation process that allows for reasonable native load protections while in alignment with the CAISO market structure instead of reverting to an OATT model. The CAISO generally agrees with the comments from the *Joint California LSEs* that, while open to exploring different frameworks, the long-term framework should be in alignment with CAISO's market framework and a move to an OATT model for reserving transmission service for all transactions, including load service, could have significant market impacts. The CAISO believes that, working collaboratively with the region, we can craft a transmission service reservation process that respects open access principles in allowing access for wheeling through the CAISO system, ensures the ability to reasonably account for native load needs, and is compatible with the CAISO's market framework. Such a framework should seek to minimize seams issues with the OATT framework as much as possible, and is further supported by the principles described in the issue paper.²⁴

Stakeholders also provided comments regarding the structure of the working groups, largely supporting an open and inclusive structure to these meetings. The CAISO will make the working groups open to all stakeholders, publicly noticed, and noticed on the CAISO calendar. The meetings will be recorded to enable those that do not have an opportunity to participate in a particular working group to follow the discussions. The CAISO will work with the stakeholders that have self-identified to dedicate time and resources to participate in the

²⁴ California ISO, *Issue Paper: External Load Forward Scheduling Rights Process*, section 3 (August 31, 2021).

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working groups to identify the meeting cadence, which will inform the meeting dates/times. As of the writing of this draft final proposal, the CAISO has scheduled working group meetings for the group discussing *Native Load and ATC Calculations*, while working groups 2 and 3 are in the process of being scheduled and noticed on the CAISO calendar. For more information on the stakeholder working groups, please refer to the issue paper and the initiative webpage where materials for each working group will be posted. The working groups will continue to meet throughout November and into ~~mid-December~~January 2022, and interested stakeholders are invited to consider sharing their perspectives and presenting ideas or proposals for discussion. The discussions in these working groups will inform development of a CAISO proposal.

6.1.2 Considerations of a Transmission Reservation Process

Although this draft final proposal is limited to the Phase 1 scope of the initiative, the CAISO takes this opportunity to discuss further aspects regarding the development of a transmission reservation process under Phase 2 of the initiative.

As noted in the issue paper, key components of a transmission reservation framework include, among others, consideration of:

- *Calculation of Available Transfer Capability (ATC)* – in order to derive the transmission capacity available for reservation, there needs to be consideration of the transmission capacity needed to serve native load, other existing commitments, as well as associated margins for which transmission capacity can be set aside to maintain system reliability prior to deriving ATC.
- *Transmission product(s) and reservation timeframes* – identifying the type of transmission product(s) that can be offered across the CAISO system, across different timeframes to minimize seams issues with the OATT framework.
- *Study process and transmission service requests driving transmission upgrades* – a process under which parties seeking to secure transmission service to establish a high market scheduling priority on a long-term basis, to the extent there is not sufficient ATC, can be studied to identify potential system upgrades needed and can drive those system upgrades.

There are associated elements as well to consider such as rate structure depending on the type of framework and transmission product(s) offered; whether parties reserving transmission service also are eligible for Congestion Revenue Rights (CRR) allocations; and potential additional elements as the framework is developed. The subsequent sections below will

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provide additional details on elements noted above, in part informed by working group discussions that have occurred thus far.

As the CAISO and stakeholders work through the process of developing the transmission reservation process, it will also be important to identify the interdependencies with the EIM and the Extended Day Ahead Market. It will also be important to evaluate implications on the CRR process and integration with the transmission planning and the maximum import capacity (MIC) allocation processes, as well as any other processes. As noted in the issue paper, depending on the nature and complexity of the framework, it may be necessary to consider a transition process to the new framework.

In light of the accelerated timeline and narrow proposal for Phase 1 of the initiative allowing for focus on Phase 2 of the initiative, section 8 of this paper shares an updated schedule for Phase 2.

Calculating ATC

ATC represents the transmission capacity available for reservation, on a particular flowgate or path, after accounting for existing transmission commitments and relevant margins for which capacity is set aside ahead of deriving the transmission capacity available for reservation. ATC is generally derived based on the following formula, which may vary across transmission providers:

$$ATC = TTC^{25} - ETC^{26} - CBM^{27} - TRM^{28} + Postbacks^{29} + Counterflows^{30}$$

Transmission capacity can be set aside as an Existing Transmission Commitment (ETC) to serve native load needs across the time horizons for which ATC is calculated. ETC also consists of other existing commitment such as existing transmission contracts and transmission reservations. The calculation of transmission capacity needed to reliably serve

²⁵ Total transfer capability across a path or flowgate.

²⁶ Existing transmission commitments, representative of existing contracts, existing reservations, and transmission capacity set aside to serve native load/network load.

²⁷ Capacity benefit margin which permits the setting aside of transmission capacity to deliver generation in declared energy emergencies to serve load and maintain system reliability.

²⁸ Transmission reliability margin which permits the setting aside of transmission capacity for different types of uncertainty in operations of the transmission system and maintenance of system reliability.

²⁹ Postbacks generally refers to addition of transmission capacity that may arise due to changes in transmission service reservations (i.e., expiration of reservations) or other conditions that have the effect of increasing ATC.

³⁰ Counterflows refers to transmission capacity that may increase the amount of ATC based on flows in the opposite direction across a path or flowgate.

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native load is largely based on generation and load assumptions to derive the amount of transmission capacity to set aside for native load needs on each path or flowgate. Through stakeholder working group 1, which is focused on calculation of native load needs and ATC, stakeholders have heard from various transmission providers across the western interconnection regarding their practices for deriving transmission capacity for native loads as ETC. For example, Idaho Power Company utilizes a 1-in-20 monthly peak load forecast to model the native load needs across the long-term ATC calculation horizon, whereas Salt River Project utilizes a 1-in-10 monthly peak load forecast, and BPA utilizes a 1-in-2 non-coincidental peak load forecast. These load forecasts are then paired with generation assumptions ultimately to derive the amount of ETC set aside for native load on each flowgate or path. The generation assumptions are informed by resources that may be owned or are under contract to the native load provider, but also by additional generation assumptions not under contract based upon how the transmission provider ultimately plans to serve the load, whether that be additional generation imports or dispatch of internal generation to serve load. This is consistent with practices of other ISOs/RTOs with a transmission reservation process as described in the issue paper. The CAISO and stakeholders will need to consider how the native load needs can be calculated across the CAISO's system and the type of load forecasts and generation assumptions that are prudent to inform the amount of transmission set aside. Additionally, there will continue to be a need to account for other existing transmission commitments such as existing transmission contracts and transmission ownership rights.

Transmission providers may also set aside transmission capacity as part of the Capacity Benefit Margin (CBM), for the delivery of imports into the BAA during an Energy Emergency Alert (EEA) level 2 or higher under NERC standards³¹, which has the further effect of decreasing ATC available for other reservations. Through working group 1, stakeholders learned that, for example, Idaho Power Company calculates CBM while SRP and BPA do not in part due to the fact that their other components of the methodology are robust enough to mitigate the need for a CBM. In Idaho Power Company's case, although the transmission capacity set aside as CBM is firm transmission, the transmission capacity is released as non-firm transmission capacity and available for reservation as such. In the event of an EEA2, if the balancing authority needs to call upon imports and utilize the firm transmission set aside under CBM to deliver these, if the particular flowgate or path is fully scheduled the balancing authority may need to curtail non-firm schedules in order to deliver those imports because the transmission capacity was set aside as firm transmission under CBM. The CAISO and stakeholders will need to consider how the CAISO could derive a CBM value – whether based

³¹ NERC Standard MOD-004-1, Capacity Benefit Margin.

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on a loss of load expectation, loss of generation or some other study – and across which import points to set aside that transmission capacity.

Transmission providers may also set aside transmission capacity as a Transmission Reliability Margin (TRM) for different types of uncertainties as described under NERC standards.³² Idaho Power Company makes very limited use of TRM, setting aside firm transmission capacity as TRM for unscheduled flows. On the other hand, SRP accounts for additional uncertainty through the TRM including delivery of replacement power in instances where a transmission line may go on outage as the single largest contingency thus enabling delivery of replacement power on firm transmission to serve load. Firm transmission capacity set aside as TRM is released and sold as non-firm transmission capacity on OASIS, but to the extent an event triggers the need to utilize TRM such as delivery of replacement power, there may be a need to curtail non-firm transmission schedules to enable flows of replacement power utilizing the TRM. The CAISO and stakeholders will need to consider for which type of uncertainty to aside firm transmission capacity as TRM and across which paths or flowgates, which would also have the effect of decreasing the amount of ATC available for other transactions to reserve.

Through the working group discussions thus far, the emerging theme is that each transmission system has different needs and different factors that may drive how they set aside transmission capacity for native load (i.e., the type of load forecast used, generation assumptions) and the type of margins to account for risk and uncertainty, be it CBM and/or TRM. Setting aside firm transmission capacity as ETC, CBM and TRM decreases the firm ATC that is available on particular paths and/or flowgates ensuring they can serve native loads and maintain system reliability, while providing open access to their system based on a transparent methodology for calculating firm ATC. To the extent the firm transmission set aside to serve native load (ETC) is not expected to be utilized, it is released as firm ATC and made available for reservation. The CAISO and stakeholders will need to take into account, as stated earlier, unique aspects of the CAISO system and the organized market in determining ultimately how to derive the different components of the ATC methodology and potential need for variability in assumptions across different timeframes for which ATC is derived (i.e. long-term ATC and short-term ATC).

Transmission Products and Reservation Timeframes

Another key component of a transmission reservation process, which will be subject of working group 2 discussions, is the determining of the type and qualities of the transmission product(s) that parties can reserve to establish the higher scheduling priority across the CAISO system along with the timeframes across which these can be reserved. As noted earlier, it will be

³² NERC Standard MOD-008-1, TRM Calculation Methodology.

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important to consider the impacts on the market when determining the transmission service product(s). Moving to an exact OATT framework, under which every transaction on the system needs to reserve transmission in advance and schedule or tag the transmission service, will likely be very disruptive to the current market structure, and thus may be incompatible. But, there may be varied frameworks under which parties can reserve point-to-point transmission service in advance to establish the high scheduling priority across different timeframes based on calculated ATC, while still being able to offer transactions into the market without the reserved transmission service recognizing that these transactions may have a lower scheduling priority. Allowing market participants to reserve transmission service and establish the high scheduling priority across different timeframes such as long-term (1-year or longer) and short term (monthly, weekly and/or daily) can bridge key seams with the OATT framework, which allows parties to reserve transmission across different timeframes to provide a level of certainty that the transmission is secured. The CAISO is open to considering different types of frameworks and ideas for transmission product(s).

Study Process and Transmission Upgrades

Another key element of a transmission reservation process is a framework that allows parties to seek longer-term certainty and a high scheduling priority across the CAISO system. Such a framework includes the ability to study and fund transmission upgrades that would provide that certainty. In upcoming working group 3 discussions, the CAISO and stakeholders will learn about transmission provider practices across the west and consider a similar approach on the CAISO system that can be integrated with current planning processes. Under the OATT, if firm transmission service of a year or longer in duration cannot be accommodated, the transmission provider may study the request for service, at the request and cost of the entity seeking service, to identify potential transmission upgrades that may be needed to accommodate the requested service of the duration they are seeking. The entity seeking the service can fund the transmission upgrade to secure the transmission capacity. The CAISO and stakeholders will need to consider enhancements to the current CAISO planning process to integrate the ability of external entities to drive studies and transmission upgrades, funded by the requesting party, in order to obtain the transmission capacity and certainty across the CAISO system if so desired.

The CAISO expects that through the Phase 2 stakeholder working groups, we can learn about practices across the west and ultimately inform development of the CAISO transmission reservation framework that protects native load needs while providing open access to the CAISO system. The CAISO is also actively working on engaging consultants to help us evaluate implementation needs and facilitate aspects of the stakeholder process as we work collaboratively to develop a transmission reservation process.

7 EIM Decisional Classification

This initiative will consider changes to the forward scheduling rights for schedules to export from or wheel through the CAISO balancing authority area. CAISO staff believes that, given the range of potential tariff changes contemplated at this early stage of the initiative, the EIM Governing Body would have an advisory role with respect to both Phase 1 and Phase 2.

The role of the EIM Governing Body with respect to policy initiatives is in the process of changing. On August 20, 2021, the Board of Governors and the EIM Governing Body jointly adopted the proposal of the Governance Review Committee, which would reformulate the authority over Section 205 filings that the Board of Governors shares with the EIM Governing Body. Although the new rules have not yet been implemented in the ISO's governance documents, the GRC's final proposal includes a clear statement of the scope:

Joint authority extends to all proposals to change or establish any CAISO tariff rule(s) applicable to the EIM Entity balancing authority areas, EIM Entities, or other market participants within the EIM Entity balancing authority areas, in their capacity as participants in EIM. This scope excludes from joint authority, without limitation, any proposals to change or establish tariff rule(s) applicable only to the CAISO balancing authority area or to the CAISO-controlled grid.

GRC Part II Draft Final Proposal, page 8.

Both Phase I and Phase II of this initiative would adjust the tariff rules that govern whether and to what extent schedules to wheel through or export from the CAISO balancing authority area would receive priority. None of the currently contemplated tariff would be “applicable to EIM Entity balancing authority areas, EIM Entities, or other market participants within EIM Entity balancing authority areas, in their capacity as participants in EIM.” Instead, the proposed tariff rules would be applicable “only to the CAISO balancing authority area or o the CAISO-controlled grid.” Accordingly, these proposals fall outside the scope of joint authority.

The GRC proposal as adopted provides that the EIM Governing Body has an advisory role over any proposal to change rules of the real-time market that fall outside the scope of joint authority. See GRC Part II Draft Final Proposal, page 12. This ensures that the EIM Governing Body “has an opportunity to provide formal input on all proposals to change real time market rules, including those rules that may significantly impact market participants in EIM balancing authority areas but that do not directly apply to them in their capacity as EIM participants.” *Id.* at 13. Because the proposals contemplate changes to the rules of the real-time market, the EIM Governing Body would have an advisory role with respect to those changes.

This proposed classification reflects the current state of this initiative and may change as the stakeholder process moves ahead. Stakeholders are encouraged to submit a response to the EIM classification of this initiative as described above in their written comments, particularly if they have concerns or questions.

Phase 1 Draft Final Proposal

8 Stakeholder Engagement

The tables below outline the proposed schedule for both phases of the initiative. The timeline and milestones for Phase 1 of the initiative, the subject of this draft final proposal, has been updated to reflect a January special session of the CAISO Board of Governors and EIM Governing Body meeting. Once that date has been identified, it will be publicly announced. The CAISO also plans to move promptly with a FERC filing seeking approval of the extension of the framework in order to provide certainty of the framework going into next summer and allow for a shift in focus toward development of the longer term framework under Phase 2 of the initiative.

The timeline for Phase 2 of the initiative identifies a straw proposal in late April 2022 to allow time for a comprehensive proposal, targeting an October 2022 draft final proposal. This timeline permits lead time for implementation of a transmission reservation process and allowing for reservations of transmission to support transactions by summer 2024. It is the CAISO’s intent to move expeditiously through Phase 2 of the initiative with robust stakeholder engagement and discussion.

Phase 1 Schedule

| Date: | Activity: |
|-------------|---|
| Jul 13 | Stakeholder workshop |
| Sept 9 | Stakeholder meeting |
| Sept 30 | Comments due - issue paper |
| Dec 10 | Post draft final proposal and draft tariff language |
| Dec 20 | Stakeholder meeting – proposal and tariff |
| 2022 | |
| Jan 7 | Comments due – proposal and tariff |

Phase 2 Schedule (2022)

| Date: | Activity: |
|-----------------|--|
| Week of Apr 25 | Post straw proposal |
| Week of June 20 | Post revised straw proposal |
| Week of Aug 22 | Post revised straw proposal |
| Week of Oct 10 | Post Draft Final Proposal |
| Week of Nov 21 | Post final proposal |
| Dec 14-15 | Joint ISO Board and EIM Governing Body meeting |
| Late Dec | FERC filing |

Phase 1 Draft Final Proposal

| | | | |
|--------------------|---|--------------|----------------|
| Mid to late Jan | Special ISO Board meeting (decision) | By June 2024 | Implementation |
|--------------------|---|--------------|----------------|

Attachment F – CAISO Memo and Presentation to CAISO Board

Transmission Service and Market Scheduling Priorities Initiative – Wheeling Through Priorities

California Independent System Operator Corporation

January 27, 2022



Memorandum

To: ISO Board of Governors and the EIM Governing Body

From: Anna McKenna, Vice President of Market Policy and Performance

Date: January 14, 2022

Re: Decision on Transmission Service and Market Scheduling Priorities

This memorandum requires Board of Governors and EIM Governing Body action.

EXECUTIVE SUMMARY

Last year, the ISO developed and implemented interim provisions that establish wheeling through self-schedule priorities as part of the ISO's market enhancements for summer 2021 initiative. The interim provisions are set to expire on June 1, 2022. Management proposes to extend the interim tariff provisions approved last year through May 31, 2024.¹

Extending these provisions will provide market participants with certainty regarding the rules for scheduling wheeling through transactions while the ISO works with stakeholders to develop a long term approach for entities to reserve available ISO transmission for wheeling transactions. The interim wheeling through provisions are a balanced approach that reasonably ensures ISO transmission is available to serve ISO load while providing external entities continued access to ISO transmission for wheeling through transactions. Management also proposes to make one change to tariff provisions regarding the resources that can back high-priority non-recallable exports. The ISO also developed the high-priority non-recallable export tariff provisions as part of the ISO's market enhancements for summer 2021 initiative.

Finally, based on stakeholder input received during the transmission service and market scheduling priorities initiative, the ISO is making certain data availability and system enhancements to provide increased transparency regarding information related to intertie transactions. These enhancements do not require tariff changes.

Management is presenting these proposed changes to the EIM Governing Body in its Advisory role, and to the ISO Board requesting its approval, at the January 20, 2022 joint meeting.

¹ Wheeling through schedules are schedules for energy flowing into and out of the ISO balancing authority area transmission system to serve load outside the ISO. Market participants submit wheeling through transactions to the ISO market as paired imports and exports as price-taker bids or economic bids. The market schedules both the import and export leg for the same amount.

In exercising its Advisory Role, Management proposes the following motion for the Governing Body:

Moved, that the EIM Governing Body advises the ISO Board of Governors, as discussed in today's, January 20, 2022 joint general session meeting, that it [supports/opposes/takes no position] on Management's transmission services and market scheduling priorities proposal.

Management further recommends the following Board motion:

Moved, that the ISO Board of Governors approves extending the currently effective, interim wheeling through self-schedule tariff provisions and to make other tariff changes as described in the memorandum dated January 14, 2022;

Moved, that the EIM Governing Body will/will not provide verbal advisory input to the ISO Board of Governors, as discussed at its January 20, 2022 joint general session meeting, supporting/opposing/taking no position on Management's transmission services and market scheduling priorities proposal; and

Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposal described in the memorandum, including any filings that implement the overarching initiative policy but contain discrete revisions to incorporate Commission guidance in any initial ruling on the proposed tariff amendment.

BACKGROUND

Last year the ISO conducted an expedited policy initiative - market enhancements for summer 2021 – in which it developed several market enhancements in anticipation of challenging system conditions during summer 2021. The enhancements included establishing scheduling priorities in the ISO's day-ahead and real-time markets for wheeling through transactions and a post-HASP process to allocate transmission capacity between wheeling through self-schedules and ISO load when conditions are stressed. The ISO Board approved these interim measures to be effective on July 1, 2021, and FERC subsequently approved them. The ISO ultimately implemented the interim measures on August 4, 2021, and they will expire on June 1, 2022.

The interim wheeling approach establishes different scheduling priorities in the ISO's day-ahead and real-time market for two categories of wheeling through transactions— priority

wheeling through transactions and non-priority wheeling through transactions.² If the market exhausts economic bids, the market optimization may have to adjust self-schedules based on the scheduling priorities in the tariff to balance available supply and demand. Scheduling priorities are of consequence when the market cannot find a feasible solution. This occurs when there is insufficient supply to meet overall demand on the ISO grid, including exports, or when imports and self-scheduled (price-taker) wheeling transactions compete for transmission capacity. The adjustment process can, among other things, reduce imports, exports, wheels, and demand bids. The interim approach established that in such circumstances, priority wheeling through transactions have the same priority as ISO load and non-priority wheeling through transactions have a lower priority.

The scheduling coordinator for a priority wheeling through must notify the ISO that it meets the eligibility requirements for priority transaction 45 days prior to the applicable month. This aligns with the deadline for ISO load serving entities to make their monthly resource adequacy showings. The priority wheeling through requirements demonstrate an external entity depends on and is committed to using the ISO transmission to serve its load similar to ISO load serving entities.

Finally, the interim approach provides that when the transmission system is constrained and priority wheeling through transactions are competing with other schedules (e.g. imports), the ISO will conduct a real-time market schedule adjustment process (the post-HASP process) to allocate transmission capacity pro rata between priority wheeling through transactions and transactions serving ISO load.

Among other enhancements, the market enhancements for summer 2021 stakeholder initiative also produced several rule changes regarding the designation of non-resource adequacy capacity backing high-priority non-recallable exports from the ISO balancing authority area. These high-priority, non-recallable exports have the same priority as transactions serving ISO load in the ISO market. These changes better ensure capacity sold to ISO load serving entities does not back high-priority, non-recallable exports. The new rules also ensure designated capacity backing high-priority, non-recallable exports is available and physically capable of sustaining the export in real-time so the ISO does not have to support the export using its resource adequacy capacity. These rules do not expire on June 1, 2022.

² Under the interim tariff provisions, a Priority Wheeling Through transaction is a “Self-Schedule that is part of a Wheeling Through transaction consistent with Section 30.5.4 that is supported by (1) a firm power supply contract to serve an external Load Serving Entity’s load throughout the calendar month and (2) monthly firm transmission the external Load Serving Entity has procured under applicable open access tariffs, or comparable transmission tariffs, for Hours Ending 07:00 through 22:00, Monday through Saturday excluding NERC holidays, from the source to a CAISO Scheduling Point.” All other Wheeling Through Self-Schedules are non-Priority Wheeling Through transactions.

PROPOSAL

The following describes Management's proposed tariff changes and data availability enhancements:

Interim Wheeling Through Tariff Provisions Extension

Management is working with stakeholders as part of its transmission service and market scheduling priorities initiative to develop a long-term approach for accommodating wheeling through transactions. The ISO intended that the interim measures would allow time to develop a more robust, long-term process for external entities to obtain transmission reservations for wheeling through transactions.

Although work on a long-term framework is progressing, it is clear that the ISO and stakeholders cannot design and implement a long-term approach by June 1, 2022, when the existing interim wheeling through provisions expire. Management thus proposes to extend the interim wheeling through tariff provisions through May 31, 2024. This will allow additional time to develop and implement a long-term approach.

As part of its transmission service and market scheduling priorities initiative to develop the long-term transmission reservation process, the ISO is benchmarking the practices of the other balancing authority areas in the west and examining the practices of other independent system operators and regional transmission organizations. In addition, the ISO is taking a collaborative approach with stakeholders to develop the long-term approach, using stakeholder "working groups" to help develop the approach. The first working group, focused on calculating native load needs and deriving transmission capacity that may be available for wheeling through transactions, commenced in November 2022. Other working groups launched in January 2022. These working groups are focused on identifying potential transmission reservation products and potential processes for assessing transmission reservation requests. They also will examine processes for incorporating transmission reservation requests for wheeling through transactions into the ISO's transmission planning process.

Extending the existing interim wheeling through provisions will allow this stakeholder process to continue. In the meantime, it will continue the interim provisions' balanced approach that help ensure ISO transmission is available to serve ISO load while providing external entities continued access to ISO transmission for wheeling through transactions to serve load outside the ISO balancing authority area.

Although, the ISO and stakeholders examined potential modifications to the interim provisions as part of the transmission service and market scheduling priorities initiative, Management concluded that implementing any significant modifications to the current approach would divert ISO and stakeholder efforts from the long-term approach and potentially delay it. Also, Management concluded extending the interim approach without

modification provides certainty about the near-term rules for wheeling through transactions that will minimize disruptions to energy procurement planning and contracting activities.

Other Tariff Revisions

In addition to extending the interim wheeling through provisions, Management also proposes to revise other tariff provisions resulting from the market enhancements for summer 2021 initiative, that do not expire on June 1, 2022.

The first change is to tariff provisions regarding the resources backing high-priority, non-recallable exports. These provisions specify that a resource can only be designated to support a high-priority, non-recallable export if the resource is expected to have sufficient available capacity to support the export quantity throughout the entire hour. For variable energy resources, this assessment is based on the resource's forecast at the time of bid submission.

Because scheduling coordinators can submit real-time bids immediately after the day-ahead market closes, this creates a risk that the forecast may overstate the capacity of the resource that will be available to support the resource in real-time. The original forecast may no longer be accurate, and a more recent forecast may show that the resource is incapable of supporting the export for the entire hour. The ISO proposes to revise the tariff to clarify that the available capacity of a variable energy resource will be determined based on the resource's most recent forecast at the time bids are due for the applicable hour of the real-time market. This sets the expectation that if the forecast changes, a scheduling coordinator for a high priority, non-recallable export should update its bid accordingly.

Data Availability and System Enhancements

Finally, in response to stakeholder requests, Management is planning several data availability and system enhancements regarding intertie transactions.

To increase transparency and help inform market participant decisions, Management plans to post on the ISO website additional data relevant to wheeling through and export transactions. This additional data will benefit market participants by providing additional information regarding conditions on the ISO system affecting these transactions. Among other uses, this information will help market participants assess the risk of intertie schedule curtailment. The ISO has already made some of the data requested by stakeholders available on its website.

Management is also planning system enhancements to enable scheduling coordinators for non-resource adequacy resources backing high-priority, non-recallable exports to view the amount of a resource's non-resource adequacy capacity. This will help facilitate the submission of more accurate high priority export schedules. The system enhancements will also notify all scheduling coordinators submitting high-priority, non-recallable export

schedules if the schedules exceed the supporting resource's non-resource adequacy capacity.

STAKEHOLDER POSITIONS

Stakeholders largely either support or do not oppose extending the interim wheeling through tariff provisions. Although some stakeholders would prefer modifications to the interim provisions or maintain their original objections to them, there is general stakeholder consensus that extending the existing provisions is desirable because it will allow the ISO and stakeholders to focus on the long-term approach and provide certainty regarding the rules in the meantime.

Stakeholders generally support the tariff revision to clarify that the most recent applicable forecast must be used for a variable energy resource supporting a high-priority non-recallable export. Some stakeholders would prefer the ISO go even further and curtail a high-priority non-recallable export during the operating hour if the supporting resource is under-producing under stressed conditions or otherwise exceeds the backing resources non-resource adequacy capacity. Management does not believe curtailments under these conditions during the operating hour after hourly schedules are set is consistent with the prevailing practice across the west, which is to continue supporting exports' schedules for the hour, even in stressed system conditions. This practice is in place to avoid adversely affecting the reliability conditions of the receiving balancing authority area. The ISO carries contingency reserves to cover generation that becomes unavailable in real-time, and the ISO would curtail high priority recallable exports on a pro-rata basis with load when there is a risk of shedding load regardless of the production level of the identified supporting resource.

A stakeholder objected to sun-setting the extended interim tariff provisions on June 1, 2024, expressing the concern it would leave ISO load unprotected. Management never intended the interim wheeling through tariff revisions to extend as a long-term solution, and most stakeholders do not support them as long-term measures. Under these circumstances, the proposed sunset date is appropriate and it echoes the ISO's commitment to prioritize moving to a long-term solution.

CONCLUSION

Management requests the EIM Governing Body, in its advisory role, recommend ISO Board of Governors approval, and the Board approve Management's interim wheeling through self-schedule tariff provisions and other tariff changes described in this memorandum. Extending the interim provisions will provide certainty to the rules as the ISO works with stakeholders to develop a long-term approach. The other tariff changes will improve the rules for high-priority non-recallable exports and clean-up other provisions.



California ISO

WESTERN EIM

Decision on transmission service and market scheduling priorities – phase 1

Greg Cook

Executive Director, Market and Infrastructure Policy

Board of Governors and EIM Governing Body Joint Meeting

General Session

January 20, 2022

EIM Governing Body Role

- Phase 1 of the initiative falls within the EIM Governing Body's advisory role.
- The proposal would modify rules that govern whether and to what extent schedules for wheeling through transactions and exports from the CAISO balancing authority area would receive priority.

Management proposes to extend the interim wheeling through scheduling priorities through June 1, 2024

- Provides certainty on rules for wheeling through the ISO
 - supports contracting for next summer operations
- Retains balanced protections for native load and priority wheel throughs
 - requirements for establishing wheeling priority limits amount of high priority wheel through transactions
 - maintains opportunity for parity of priority for wheel through shown 45 days ahead as ISO load
- Allows for time to focus on a long-term durable solution to establish a transmission reservation process

Propose a change to how variable energy resources can support high priority exports

- Current rules require resources supporting a high-priority exports have sufficient capacity for the entire hour
 - requirement can be met by a variable energy resource based on the forecast at the time of bid submission
 - problematic when real-time bids are submitted soon after the day-ahead market close because the forecast may overstate available capacity
- Propose to require variable energy resources supporting high-priority exports be based on the most recent forecast ahead of the real-time market close for the relevant hour

Propose data availability and systems enhancements in response to stakeholder requests

- Post additional data on ISO website related to wheeling through and export transactions
- Systems enhancements to foster coordination between supporting resources and scheduling coordinators submitting high priority exports
 - further visibility on resources' non-resource adequacy capacity
 - provide notification when high priority export schedules exceed the non-resource adequacy capacity of the supporting resource

Stakeholders largely support the proposal

- Support extension of the market scheduling priorities to provide time to develop long-term framework
 - however, recognition that extension is a compromise and seeking the ISO prioritize work on the long-term framework in 2022
- Acknowledge that the data availability enhancements are responsive to their needs and will provide added benefit in informing intertie transactions under interim framework

Management proposes that the Board approve its proposal to extend the interim wheel through scheduling priorities framework until June 1, 2024

- Provides certainty to the market that current rules will be in place for next two summers
- Enhances provisions for variable energy resources supporting high priority export transactions
- Allows the ISO and stakeholders to focus on developing a comprehensive long-term solution for allocating available transmission capacity through a transmission reservation process

EIM Governing Body Motion on Advisory Role

Motion

Moved, that the EIM Governing Body will/will not provide verbal advisory input to the ISO Board of Governors, as discussed at its January 20, 2022 joint general session meeting, supporting/opposing/taking no position on Management's transmission services and market scheduling priorities proposal.

Moved:

Second:

| EIM Governing Body Action: | Vote Count: |
|----------------------------|-------------|
| Decker | |
| Fong | |
| Gardner | |
| Kondziolka | |
| Prescott | |

Board of Governors Motion

Motion

Moved, that the ISO Board of Governors approves extending the currently effective, interim wheeling through self-schedule tariff provisions and to make other tariff changes as described in the memorandum dated January 13, 2022;

Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposal described in the memorandum, including any filings that implement the overarching initiative policy but contain discrete revisions to incorporate Commission guidance in any initial ruling on the proposed tariff amendment.

Moved:

Second:

| Board Action: | Vote Count: |
|---------------|-------------|
| Bhagwat | |
| Borenstein | |
| Galiteva | |
| Leslie | |
| Schori | |