

MEMORANDUM

DATE: January 24, 2023

To: WEIM Governing Body

From: Susan L. Pope, WEIM Governing Body Market Expert

Subject: Opinion on ISO Final Proposal, Transmission Service and Market Scheduling

Priorities – Phase 2, January 18, 2023

I. INTRODUCTION

As the Western Energy Imbalance Market (WEIM) Governing Body has requested, this memorandum provides my comments on the California ISO's Phase 2 Final Proposal for the Transmission Service and Market Scheduling Priorities Initiative (Final Proposal).¹ This is commonly referred to as the Phase 2 "Wheel-Through" proposal or initiative because it is the second phase of a stakeholder process to establish priorities for schedules to wheel power through the California ISO transmission system.

In the following section, I introduce the context for the Phase 2 Proposal. In Section III, I offer observations and assessments regarding the market rules proposed for each major proposal element, i.e., the calculation of Available Transfer Capability (ATC), accessing and reserving ATC, application of priorities in the post-Hour-Ahead Scheduling Process (HASP), and the transmission study and expansion process. Section IV summarizes my most material conclusions.

In Section V, I offer specific recommendations for your consideration as you deliberate the advisory opinion you will provide to the California ISO Board of Governors. I explain why I recommend that the Governing Body should advise the Board of Governors to approve the Final Proposal and highlight two issues the Governing Body should consider as it assesses this recommendation. Additionally, in this section I suggest your advisory support recommend that the Board of Governors' approval ensure robust monitoring of certain outcomes of the proposal and, further, that it include a strong suggestion to California ISO staff to revise elements of the Final Proposal prior to finalizing tariff changes.

II. PROPOSAL CONTEXT

Rotating outages during the Summer of 2020 signaled the urgent need to clarify the California ISO's wheeling through market rules. These rules determine the relative priority of schedules to wheel power through the California ISO transmission system to support electricity service to customers outside of

¹ California ISO, *Transmission Service and Market Scheduling Priorities – Phase 2, Final Proposal*, January 18, 2023, www.caiso.com/InitiativeDocuments/FinalProposal-TransmissionService-MarketSchedulingPrioritiesPhase2.pdf



California versus schedules to transfer power into the system to serve the electricity customers of California ISO load serving entities (LSEs). Phase 1 of the Wheel-Through initiative established interim wheeling through rules that will expire on May 31, 2024. At that time, market rules developed during Phase 2 are intended to replace Phase 1 as a "durable wheeling through framework that can evolve with operational experience."²

The final proposal addresses the challenging task of defining market rules to be used to move power to and from balancing areas using Open Access Transmission Tariff (OATT) transmission reservation and scheduling procedures and the California ISO, where transmission access and priority are determined during the operation of a bid-based competitive power market. In the California ISO, there are no physical transmission rights for native load or point-to-point transmission service that can be connected to physical contracts for OATT service at the interties (except for a small number of pre-OATT transmission service contracts). The Phase 2 initiative seeks to meet the needs of transmission customers inside and outside of the California ISO to move power across the California ISO interties while maintaining those aspects of each market paradigm supporting efficient energy trading and reliable electricity grid operation.

For simplicity, the remainder of this memorandum will assume familiarity with the Phase 2 Final Proposal and will address those issues for which I would like to provide observations or recommendations for the Governing Body's consideration. Please refer to Section 4 of the California ISO Final Proposal for additional information about the Phase 1 and Phase 2 initiatives, explanation of existing transmission reservation and scheduling rules in OATT balancing areas and in the California ISO, and other background to the proposal.

III. OBSERVATIONS AND ASSESSMENTS

a. Calculation of Available Transfer Capability

Overall, revisions to the Final Proposal have responded to stakeholder comments and have added details about how wheeling through ATC will be calculated. The promise of a transparent yearly process for review of the ATC provides a regular opportunity for all stakeholders to review the calculation and identify gaps, if any, in the market rules.

Below, I offer specific comments on the proposed calculation of ATC.

• The proposal to provide California ISO LSEs with the opportunity to demonstrate new forward contracted import supply at the time that ATC is initially calculated for a particular month is reasonable provided that the implementation does not allow for any double-counting of Existing Transmission Contract (ETC) reservations for California ISO loads.³ The initial ETC will be estimated from historical volumes of import supply contracted by the LSEs during the like-months of the two previous years. This market rule, introduced in the Final Proposal in response to stakeholder comments, addresses the reasonable possibility that an LSE's contracted suppliers might change and

² *Ibid*, p. 7.

³ *Ibid,* p. 4.



necessitate different ETC than demonstrated for the historical months. The market rules to implement this change should ensure that there is no double-counting of ETC reservations from a particular supply source and provide for the elimination of ETC reservations for supply that is no longer under contract with the LSE because it has been replaced by the new forward contract.

- In the final proposal, the California ISO distinguishes between Resource Adequacy (RA) imports and non-RA imports. Specifically, it proposes to represent the historical quantity of LSE imports over an intertie as the higher of the "sum of RA imports and non-RA imports under contract to an ISO load serving entity, for that particular month over the two prior years." This is a necessary improvement to the methodology proposed in prior drafts because it eliminates the possible double-counting of contracts that may be deemed as RA in one year but non-RA in the next year, or vice versa.
- The California ISO has introduced a change with the final proposal to allow greater latitude in the adjustment of the transmission reservation margin (TRM) on specific interties due to changes in uncertainty. This is a reasonable modification because there are many reasons why the degree of uncertainty about the import dependency of the California ISO LSEs could change. At the same time, it is important that TRM not unreasonably constrain the ATC available for wheeling through schedules. ATC for wheeling through is needed to support the efficiency of bilateral trading by non-California ISO entities and the resource adequacy of some non-California ISO LSEs.
 - The proposal states that the increase in latitude for TRM adjustments is motivated in part by "ISO load serving entities and the Department of Market Monitoring (DMM) [suggestions] that the design should consider a larger TRM across the 13-month horizon due to the greater level of uncertainty associated with assumptions made further out in time." The proposal does not, however, appear to adopt the DMM's tandem suggestion for additional ATC to be released as load forecast uncertainty is reduced closer to the time of the power flow. The proposal states that the monthly TRM will be carried forward into the calculation of daily ATC and also that TRM reserved for the risk of transmission outages would not be made available for ATC reservations. However, it does *not* state that any TRM *would be released* and made available for wheeling through reservations (or reservations for California LSE imports) closer to real time. In my view the market rules should stipulate daily release of TRM insofar as the year-ahead or month-ahead TRM reservations are increased to account for higher levels of uncertainty further out in time.

⁴ Ibid, p. 23. Appendix 1 of the Proposal requires revision to reflect this methodological change.

⁵ *Ibid*, p. 29.

⁶ *Ibid*, p. 29.

⁷ Department of Market Monitoring, *Comments on Transmission Services and market Scheduling Priorities – Phase 2, Draft Final Proposal,* January 4, 2023, p 4, www.caiso.com/Documents/DMM-Comments-Transmission-Services-Market-Scheduling-Priorities-Phase2-Draft-Final-Proposal-2023-01-04.pdf

⁸ *Ibid,* p 32.

⁹ *Ibid*, p. 31.



o I am concerned with language in the final proposal stating that the proposed annual meeting to preview "ATC values and the various components of the ATC calculation" envisions discussion of "the determination of the TRM values for the upcoming 13-month period." This suggests the possibility of increases in the TRM for months for which an initial TRM was previously determined and wheeling through ATC has already been reserved, because these months are within the 13-month period. If the California ISO envisions the possibility of upward adjustments of TRM for months for which the initial wheeling through ATC has been previously determined, market rules should ensure that these adjustments cannot degrade existing wheeling through reservations and, further, do not unreasonably reduce the ATC available for wheeling through reservations below the initially determined values. The rules could consider whether increases in TRM associated with certain types of increased uncertainty, such as outages of suppliers to California ISO LSEs, should be deducted solely from the ATC available to the LSEs.

Importantly, several factors bound TRM adjustments, including consistency with NERC standards and the promise of a transparent stakeholder meeting to review the ATC methodology at least once per year.

• The Department of Market Monitoring and some stakeholders are concerned that the estimation of ATC should include assessment of whether the California ISO's internal transmission network can support the ATC made available for wheeling through schedules. Based on the California ISO's analysis of its internal transmission system capability during the September 2020 and September 2022 periods of peak load, I am persuaded that the final proposal, which omits this assessment of internal transmission capability from the ATC calculation, is reasonable. My view is influenced by the fact that ATC can be reserved at most one year in advance, which provides sufficient time for the California ISO to assess annually whether internal transmission constraints could be binding and to modify the market rules, if necessary.

b. Accessing and Reserving ATC

Under the final proposal, ATC reservations for wheeling power through the California ISO and reservation of ETC for California ISO load serving entities will be tied to physical contracts for power to serve load. The California ISO load serving entities, the reservations will primarily derive from historical use of the interties to import power from RA and non-RA contracted suppliers. This methodology is similar, at a high level, to the procedures employed for allocations of financial transmission rights in several centralized power markets, including the California ISO.

There is no current precedent, however, for connecting the reservation of OATT point-to-point transmission service with demonstration of a firm or conditional firm power contract to serve load matching the transmission service request. This raises the question of whether the demonstration of a

¹⁰ *Ibid*, p. 32.

¹¹ *Ibid*, p. 4.



firm power contract utilized to serve load is a reasonable and workable elaboration of the OATT framework for the purpose of establishing wheeling through reservations for a non-OATT region.

My overall assessment is that the required demonstration of a firm or conditional firm power contract to serve load to support requests for wheeling through ATC is not unreasonable in the present context. However, the proposed rules requiring a firm or conditional firm power contract might not be sufficient to achieve the intended result of tying the initial allocation of wheeling through reservations to power contracts utilized to serve load.¹²

The remainder of this section presents my assessment of three issues related to accessing and reserving ATC:

- The rationale for linking wheeling through reservations to power contracts to serve load,
- Whether the proposal will yield wheeling through reservations linked to power contracts to serve load, and
- The market rules for assigning wheeling through ATC to multi-month power contracts.

Assessment of rationale for linking wheeling through reservations to power contracts to serve load.

The linking of requests for wheeling through reservations to firm power contracts would support the provision of high priority transmission service for entities participating in the Western Resource Adequacy program (WRAP).¹³ When in operation, WRAP will enable sharing of resource adequacy resources, but will require advance showings of a firm transmission delivery path from source to sink for a certain percentage of resources. Since some of the WRAP supply might seek to be wheeled through the California ISO, WRAP participants will require a way to demonstrate California ISO wheeling through priority in advance. Thus, demonstration of a firm power contract as a condition for a wheeling through ATC reservation request appears to be a logical way to coordinate the wheeling through market rules with those anticipated for the WRAP.

Assessment of whether the proposal will yield wheeling through reservations linked to power contracts to serve load. The ATC wheeling through reservations awarded through the proposed monthly reservation process might in some instances have a market value greater than their cost. The cost is the obligation to pay the Wheeling Access Charge (WAC) for the transmission reservation. If this occurs, parties other than LSEs and their contracted suppliers are likely to vie for wheeling through reservations. This competition creates the potential for results differing from those that appear to be intended by the final proposal. Thus, the wheeling through reservations resulting from the proposed rules for accessing and reserving ATC will not necessarily be assigned to parties who need them to provide electricity service for load under an existing power contract.

When and where the ATC wheeling through priority is valuable, LSEs and/or their suppliers with the required power contracts compete for wheeling through reservations with other profit-motivated market participants who will seek ways to request wheeling through priority without an advance

¹² Further, since all power will ultimately flow to load, the Proposal terminology of "power contracts utilized to serve load" is arguably ambiguous.

¹³ www.westernpowerpool.org/about/programs/western-resource-adequacy-program.



contract utilized to serve load. This result could occur without direct violation of the proposed wheelthrough market rules. For instance:

A power marketing entity might enter a contract with a southwestern LSE to buy 50 MW of power at a southwestern delivery point and backed by a high priority California ISO wheeling through reservation. At the same time, it could enter a contract to sell 50 MW of power to the southwestern LSE from its supply in the northwest and request a California ISO wheeling through reservation for the delivery of this power to the southwestern load. With these two contracts, the power marketer would have rights to 50 MW of firm power in the southwest backed by a high priority wheeling through reservation.

I question whether the California ISO could implement monitoring and disclosure procedures to prevent this outcome because it is accomplished by way of third-party contracts.

The proposed rules for determining which contracts are awarded wheeling through reservations during the monthly request window also invite creative power contracting to jump forward in the reservation queue for valuable intertie ATC. The market rules for awarding ATC reservations appear to be intended to provide the reservations to loads who need them the most because they are wheeling power for the greatest number of hours and would be willing to pay the WAC for these hours. 14 Implementation of the proposed rules might not produce this result, however. Because the reservations will be awarded based on the number of hours of service stated in the originating power service contract, entities can change their place in the reservation queue by increasing the duration of the contract or the number of hours per day covered by the contract, without regard to the quantity of power under contract in each hour.¹⁵ Thus, if there are LSEs requiring particular wheeling through reservations, they could be compelled to contract for more hours of power than they need (with a contract of longer duration or for more hours of the day) to advance in the queue for ATC reservations. 16

In concept, the consequences of the incentives described herein could include: a possible advantage to parties selling power to LSEs needing wheel-through reservations because they may be able to negotiate a contract to sell firm power during extra hours; a guessing game for LSEs about how many hours of power to contract for to secure the wheeling through reservations they need; possibly extra WAC revenue for California customers due to expansion of the number of hours of LSE power contracts; and possibly less flexibility in the dispatch if suppliers operate as must-run in additional hours under longerterm firm supply contracts.

A change introduced in the Final Proposal appears to enable an additional way to jump the queue for wheeling through reservations for valuable interties, further increasing the uncertainty of wheeling through reservation awards. In response to a stakeholder suggestion, the ISO states that "a reduction in

¹⁴ *Ibid*, pp. 38-39.

¹⁵ The originating power contract is required to be firm, but I agree with one MSC member's questioning about how the California ISO will judge the contractual provisions constituting a firm vs. non-firm power contract. The California ISO stated that the contracts must be "must-take," but this stipulation is not included in the Proposal. ¹⁶ This contract modification, if it were to occur, implicitly increases the price paid for the wheeling through reservations for the hours when they are actually needed because the WAC is paid for hours when the wheeling through priority reservations are not necessary.



duration or MW amount of the underlying supply contract does not terminate the wheeling through priority, but would create an amount of transmission capacity that can subsequently be released as ATC."¹⁷ With this provision in place, a party could move to the front of the ATC allocation queue by demonstrating a power supply contract for a large number of hours and then, later, modifying the contract and releasing the ATC for unwanted hours back for reallocation. Assuming the WAC obligation would be terminated for the released hours, this could be an easy and costless way to jump ahead in the ATC reservation queue for a valuable intertie.

For the reasons described in this section, restricting initial awards of wheeling through reservations to parties with the longest duration contracts to serve load may not achieve this end in practice when the value of wheeling through reservations substantially exceeds the WAC that would be paid for the reservations. However, the issues described are unlikely to happen when and where the WAC is higher than the value of the priority conferred by a wheeling through ATC reservation. Since, in practice, the Proposal might not result in wheeling through reservations aligned with the apparent intent of the proposed market rules for accessing and reserving ATC, the ISO states that it will monitor holdings of wheeling through reservations through disclosure requirements and modify the reservation process if needed.

As long as the ISO and WEIM stakeholders accept the possibility that the initial allocation of wheeling through reservations may not match the apparent intentions of the proposed market rules, it is reasonable to move forward with the finalpProposal as it stands and monitor the outcome, as the California ISO suggests. If demand is not strong for wheeling through reservations, the issues described herein might not arise. On the other hand, if there is strong demand on some interties, the parties needing wheeling through reservations for WRAP might have to buy them from a third party. Even if this were the case, though, it would not be a problematic outcome from the perspective of economics unless there were problems with the competitive functioning of the resale market.

My view on this element of the Proposal substantially relies on the maximum term of wheeling through reservations. If the reservation process proposed were to be applied to assign 10-year reservations, my opinion would not be the same. Under the present Proposal, wheeling through reservations can be obtained for at most one year at a time, so that issues with the reservation process rules could be corrected relatively quickly and could adjust to possible changes in market structures in the West.

Furthermore, based on my experience I conclude that it would be difficult to expeditiously improve the Final Proposal to achieve the apparently intended result of awarding wheeling through reservations to parties with the longest-term power contracts to be utilized to serve load. This would entail clearly defining the power contracts eligible for reservations, crafting effective market rules (if possible), and working through these issues in a stakeholder process.

Market rules for assigning wheeling through ATC to multi-month power contracts. As a final point regarding the process for accessing and reserving ATC, I would like to observe that the Final Proposal

¹⁷ *Ibid.* p. 40.



does not sufficiently describe how monthly wheeling through ATC requests will be awarded for multimonth power contracts. For instance, the final market rules should address the following questions:

- Will the selection of ATC assignments be conducted by looking at the requests for one month and determining awards for that month before moving on to determining awards for the next month? If so, could a party make its acceptance of an ATC assignment for one month be conditional on being awarded ATC for the same contract for following months as well, as might be desired by parties with conditional firm power contracts? If so, does this mean that the ATC reservation process might be iterative?
- Alternatively, might the California ISO develop a wheeling through ATC assignment methodology to examine all wheeling through ATC requests made during a monthly request window at the same time, without regard to which month each request is for or the number of months for which ATC is being requested? If so, how would this work? In this situation, could a party submit multiple requests associated with the same power contract (e.g., for different combinations of months) and stipulate the ranking of its different requests? For example, "If I'm not awarded ATC for June, please consider my request for ATC in both May and June, since this would have higher priority?"

These example questions illustrate some of the issues that arise in considering the wheeling through reservation access of multi-month power contracts. The California ISO has stated its intention to be flexible in responding to wheeling through ATC requests, but based on my experience, I believe some additional rules will be needed to address multi-month requests. The California ISO and its stakeholders should be able to develop these rules, but they could lead to a more complicated process for accessing and reserving wheeling through ATC than the rules described in the final proposal.

c. Application of Priorities in Post-HASP Process

The final proposal includes clarifications to respond to questions about whether there are circumstances under which the priority of an existing wheeling through reservation could be reduced after the reservation has been obtained. Stated another way, the question is whether, if the post-HASP process occurred, the per-MW pro-rating percentage applied to a wheeling through reservation could be higher than the pro-rating percentage calculated at the time the reservation was obtained. The proposal addresses this point in the following statement: "the ISO would adopt a rule whereby the amount of awarded priority wheeling through transactions plus the amount of capacity represented as ISO load for the hour (set aside transmission for historical contracted imports, contracted imports securing daily ATC, imports under TRM, and CPM imports to the extent they are supported by ATC or TRM) cannot exceed the TTC of the intertie for purposes of conducting a post-HASP process. Thus, the amount of capacity considered for pro rata allocation in the post-HASP Process cannot exceed the TTC of the intertie."¹⁸ From this I understand the maximum pro-rating percentage to be determined by the TTC of the intertie, although it could be less than this maximum if (in a corner case) the sum of all actual ATC reservations, TRM and CPM were less than the TTC yet the ISO nevertheless had to use the post-HASP process.

¹⁸ *Ibid*, p. 44.



I offer further observations on the post-HASP process in the following paragraphs.

- The maximum per-MW pro-rating percentage of a wheeling through reservation is set at the time of the initial determination of ATC, with one possible exception. The per-MW pro-rating of a wheeling through reservation could exceed that set at the time of the initial determination of intertie ATC if the TTC of an intertie were to increase and the ensuing increase in ATC were reserved (by either a California ISO LSE or another wheeling through transmission customer). Thus, the denominator used in prorating existing wheeling through reservations cannot exceed the TTC at the time of the initial determination of wheeling through reservations unless TTC subsequently increases and is reserved as ATC by a wheeling through customer or California LSE.
- The California ISO proposal to account for ATC for Capacity Performance Mechanism (CPM) import supply would protect entities with wheeling through reservations from an increase in their potential pro-rating percentage due to CPM. This is because the CMP imports would be permitted to rely on only unscheduled ATC and TRM capacity: "To the extent there is no remaining ATC to account for the CPM, nor sufficient TRM, similar to other supply, [CPM] can continue to be offered into the market and can be committed or dispatched to serve ISO load, but in corner case scenarios it would not be part of the post-HASP ratio representing ISO load when curtailing priority wheels through the system and ISO load transactions on a pro-rata basis." 19
- While the proposal does not allow CPM to degrade existing wheeling through reservations, it could result in CPM reducing the ATC available for reservation daily: "The proposal is to account for CPM import supply to the extent there is remaining ATC in the daily timeframe, prior to release for reservation the following day, at the particular intertie where the supply is being secured." Although this element of the proposal would only reduce the ATC available for wheeling through transactions (and/or LSE transactions) scheduled at the very last moment, these last-minute transactions could be extremely important under the tight system conditions existing any time this market rule would be relevant. For this reason, I suggest the California ISO instead accept daily wheeling through reservations that would have been feasible in the absence of the CPM. This suggestion is supported by the related market rule under which CPM would not be included in determining post-HASP pro-rating percentages under the corner case in which it cannot be covered by ATC or TRM capacity. The change I suggest would simply add to the CPM excluded from the post-HASP ratio representing ISO load when curtailment occurs under the corner case discussed in the prior paragraph.
- It is important to observe that the monthly ATC set aside for wheeling through must be reserved 30 days prior to dispatch (T-30), or it could be allocated during the T-30 true-up to LSEs in the California ISO with import contracts exceeding their initial historical allocation.²¹ This element of the proposal

¹⁹ *Ibid,* p. 41.

²⁰ *Ibid*, p. 41.

²¹ *Ibid*, pp. 27-28: "[If] the amount of transmission capacity set aside for native load an [sic] load growth at an intertie is less than the contracted import supply (RA and non-RA), including the TRM for uncertainty, if there is any remaining ATC at that intertie that has not been reserved, it will be reduced to make up this deficit or difference. If there is no remaining ATC at an intertie because it has been reserved in advance, then the set aside



is explained as being consistent with the obligation of California LSEs to demonstrate "100% of their RA supply obligation in the month-ahead timeframe."²² On the one hand, the proposed market rule is not unreasonable because, symmetrically, additional ATC would be made available during the true-up if the T-30 ATC reservations of California LSEs were less than the monthly ATC set-aside for the LSEs. This additional ATC would be available on a first-come, first-served basis to both wheeling through customers and LSEs during daily reservation windows commencing seven days prior to the real-time power flow.

On the other hand, however, the methodology for calculating the ATC available for wheeling through reservations already includes several protections to address the possibility that LSE ATC needs could be higher than the historical estimates. ATC will be reserved to cover LSEs' annual load growth, and TRM will include margins for load forecast uncertainty and to address the possibility of changes in the power flow, which should at least partially address the possibility of LSE imports exceeding the historical forecasts. The California ISO should explain why using ATC set aside for wheeling through transactions to support additional LSE imports would not be double counting. Wheeling through customers could have substantial need for high-priority daily reservations at times and the proposal does not explain why it is necessary for them to have to contract for supply prior to T-30 to avoid the risk that daily reservations might not be available because of LSEs contracting above the historical forecasts. EIM entities will be making on-going financial decisions about when and where to contact for power supply and will need to be able to track the quantity of remaining ATC reservations on interties without the risk that all remaining supply could suddenly disappear at T-30.

For these reasons, I do not at this time agree that the T-30 true-up should be able to use monthly ATC set aside for wheeling through transactions that has not yet been reserved. It is not apparent that all alternatives have been discussed and explored. Why does the Proposal explicitly exclude the use of TRM to support these LSE contracts to the extent possible? However, I understand objection to the proposed market rule for the T-30 true-up begs the difficult question of the reservation priority of LSE RA contracts without monthly ATC reservations. If it is not possible to avoid use of unreserved monthly wheel-through ATC to provide ATC reservations for RA contracts at T-30, then a process should be developed to provide advance information and transparency to EIM entities about the potential for a substantial reduction in available wheeling through reservations at T-30.

It will be important to monitor and assess the accuracy of the initial monthly forecasts of ETC to identify whether there is consistent underestimation or overestimation of LSE external supply contracts and, if so, the reasons should be investigated and addressed expeditiously.

The California ISO should clarify its explanation of how load conformance could trigger the post-HASP process and how prorating would be affected in this situation. It is unclear how load conformance could trigger the post-HASP process unless it caused an out-of-market action

for native load will remain as originally calculated, and the ISO will continue to honor the scheduling priority of wheel through transactions for which ATC has been reserved in advance to the extent a grid or market condition arises that requires application of market scheduling priorities."

²² *Ibid*, p. 23.



increasing imports on an intertie. Whatever the reason for the triggering of the post-HASP process, though, it is necessary for stakeholders to understand how load conformance could affect the firmness of their wheeling through reservations. The California ISO has committed to developing internal processes to identify, when it enters the post-HASP process, whether this has been caused by load conformance and, additionally, to determine whether the load conformance is actually necessary to avoid shedding load. The Proposal states that these steps will determine whether prorating of high priority LSE and wheel through schedules is actually necessary. In the end, however, the California ISO has not explained *why* load conformance could trigger the post-HASP process or why, if this occurs, it is reasonable to pro-rate wheeling through reservations.

d. Transmission Study and Expansion Process

I have only one comment with respect to the final proposal for how long-term wheeling through reservation requests would be evaluated and allocated through a transmission study and expansion process.

In concept, parties paying to expand the capacity of the transmission system should be awarded incremental Congestion Revenue Rights (CRRs) associated with an intertie transmission expansion as well as receiving WAC credits to repay the funding of the transmission upgrade. (These might be called something other than CRRs to distinguish them from rights to congestion revenue arising on the internal California ISO transmission system.) Prior to a transmission upgrade, a transmission customer scheduling priority wheeling through service will pay the WAC and the congestion cost (internal and intertie) for its schedule. It follows that if it were to pay for a transmission expansion, it should avoid paying both charges for the incremental transmission capacity it has provided. Per the final proposal, it would receive a WAC credit when it schedules use of the intertie it has upgraded. Additionally, it should be awarded incremental CRRs (both internal and for the intertie) corresponding to its addition to transmission system capacity. The award of incremental CRRs means that if congestion occurs, despite the transmission expansion, the party would receive CRR revenue for the incremental internal and intertie transfer capacity it has funded.

IV. CONCLUSIONS

In this section I highlight my most important conclusions and observations about the wheeling through final proposal.

a. Calculation of Available Transfer Capability

There are a few material issues with the proposed calculation of ATC.

 In my view, the California ISO should progressively release TRM capacity reserved for uncertainty during the monthly determination of ATC as the degree of uncertainty diminishes moving toward real-time. This will be of increased importance if the California ISO exercises the latitude it requests to possibly increase monthly TRM estimates.



If the California ISO envisions the possibility of upward adjustments of TRM for months for
which wheeling through ATC has been previously determined, market rules should ensure that
these adjustments cannot degrade existing wheeling through reservations and, further, do not
unreasonably reduce the ATC available for wheeling through reservations below the initially
determined values.

b. Accessing and Reserving Available Transfer Capability

The required demonstration of a firm or conditional firm power contract to support requests for wheeling through ATC is reasonable in the present context. However, the proposed rules might not be sufficient to achieve the intended result of tying the initial allocation of wheeling through reservations to in-hand power contracts serving load.

When intertie ATC is valuable and oversubscribed, parties may engage in strategic behavior to obtain wheeling through reservations. If this occurs, it could create substantial uncertainty for WEIM LSEs who require wheeling through priority, as they must assess how the strategic behavior might affect them and determine how to respond.

The ISO states that it will run a disclosure process to assess the effectiveness of the market rules for tying wheeling through reservations to power contracts utilized to serve load. However, it is not clear how the ISO could detect or police efforts to obtain wheeling through reservations by parties effectuating this outcome with third-party contracts. At worst, WEIM entities requiring wheeling through reservations to serve load may need to buy them from third parties, which would not be problematic from an economic perspective unless there were competition issues in the resale market.

The ISO should remove the addition to the Final Proposal allowing a party to modify its wheeling through ATC reservations upon a reduction in the duration or number of hours covered by its power supply contract. This addition would allow parties to jump to the front of the ATC allocation queue for an intertie by writing a contract for a larger number of hours than required and then, after receiving the desired reservation, reducing the hours under contract to the desired quantity.

c. Application of Priorities in the Post-HASP Process

The final proposal clarifies that existing wheeling through reservation priority cannot be less than that determined at the time of the 13-month ahead initial determination of wheeling through ATC, with one exception. The only way the maximum per-MW pro-rating of a wheeling through reservation could exceed that set at the time of the initial determination of intertie ATC would be if the TTC of an intertie were to increase during the year and the ensuing increase in ATC were reserved (by either a California ISO LSE or a wheeling through transmission customer).

It is important for the WEIM Governing Body and WEIM stakeholders to understand that under the proposal the ATC initially set aside for wheeling through must be reserved prior to T-30, or it could be allocated during the T-30 true-up to LSEs in the California ISO with import contracts exceeding their initial historical allocation. My view is that the T-30 true-up should not be able to use monthly ATC set-aside for wheeling through transactions that has not yet been reserved. However, I also understand



that the proposed approach could be necessary to avoid a conflict between the proposal and the existing RA process in California. If it is not possible to avoid use of the unreserved wheel-through capacity to provide ATC reservations for extra LSE RA contracts at T-30, then TRM should be used first, if possible, to support these contracts, and a process should be developed to provide advance information and transparency to EIM entities about the potential for a substantial reduction in available wheeling through reservations at T-30.

Under the proposal, CPM cannot increase the pro-rating percentage of existing wheeling through reservations. However, daily ATC could become unavailable for wheeling through reservations due to CPM imports. I do not support this approach because this ATC could be important for last-minute wheeling reservations under tight system conditions. Moreover, the proposed rule is not consistent with the related market rule under which CPM would not be included in determining post-HASP prorating percentages if the CPM is not supported by extra ATC or TRM capacity. The proposal thus acknowledges that in corner cases the import capacity will be scarce and valuable to wheeling through customers. If it has agreed to support wheeling through reservations when prorating becomes necessary, it is not consistent to remove the last chance for wheeling through customers to use daily ATC. I therefore suggest the California ISO continue to accept daily wheeling through reservations that would have been feasible in the absence of the CPM.

The proposal does not explain *why* load conformance could trigger the post-HASP process or why, if this were to occur, it would be reasonable to pro-rate wheeling through reservations. The California ISO has committed to developing internal processes to identify, when it enters the post-HASP process, whether this has been caused by load conformance and, additionally, to determine whether the load conformance is necessary to avoid shedding load. These assurances do not, however, explain the conditions under which it is reasonable for load conformance to cause the pro-rating of existing wheeling through reservations.

d. Transmission Study and Expansion Process

My only comment on the transmission study and expansion process is to suggest that parties who pay to expand intertie capacity should be allocated the congestion rents corresponding to the incremental intertie capacity expansion.

V. RECOMMENDATIONS

In my view, the WEIM Governing Body should advise the ISO Board of Governors to approve the final proposal because it is a reasonable way to enable WEIM transmission customers to obtain advance high priority wheeling through reservations on the California ISO transmission system. The proposed market rules appear to align with current practices for arranging for OATT service for bilateral power contracts.²³ The final proposal also accounts for use of the California ISO transmission system by California ISO loads without hindering the operation of the California ISO electricity market.

²³ My conclusion here defers to forthcoming results of OATI's review of the proposal.



Moreover, the proposed market rules have been sufficiently elaborated to guard against unsupported or excessive ETC or TRM set-asides for California loads. If the ETC or TRM calculations appears to be too high, the WEIM stakeholders will have an opportunity to expose issues and problems through the annual process for reviewing the ATC calculation.

CONSIDERATIONS: In assessing my recommendation of advisory support for the final proposal, the Governing Body should consider that the market rules to implement the proposal are unlikely to guarantee the allocation of wheeling through ATC during the monthly request windows exclusively to parties with contracts in hand to serve load. I suggest that the WEIM Governing Body evaluate my assessments of how this could occur and the possible consequences for WEIM entities. In weighing this matter, it is relevant to consider the desired point in time for implementation of new wheeling through market rules and the possible time that would be required to improve this element of the final proposal.

In considering my recommendation for advisory support, the WEIM Governing Body also should also bear in mind my concern about the proposed use of unreserved monthly wheeling through ATC to support LSE contracts during the T-30 true-up process, if necessary. My advisory recommendation recognizes that this element of the proposal may be needed for consistency with California RA rules and procedures.

MONITORING RECOMMENDATION: While advising the ISO Board of Governors to approve the final proposal, I suggest the WEIM Governing Body request robust processes for: monitoring the calculation of wheeling through ATC; assessing the effectiveness of the market rule preconditioning requests for wheeling through reservations on possession of a matching power supply contract; and evaluating the T-30 true-up rules potentially assigning to LSEs some or all unreserved monthly wheeling through ATC.

RECOMMENDED CONDITIONS TO BE INCLUDED IN ADVISORY APPROVAL: I also recommend that the WEIM Governing Body's advisory support strongly urge the ISO Board of Governors to include suggestions to California ISO staff in their approval of the Final Proposal. As discussed herein, these suggestions would be to: (1) eliminate a modification included in the final proposal whereby a party with a wheeling through reservation could reduce the number of reserved hours following receipt of the reservation; (2) substantially clarify how the reservation process for wheeling through ATC will address multi-month requests; (3) modify the proposal to accept daily wheeling through reservations that would be feasible in the absence of CPM; (4) modify the proposal so as to progressively release TRM capacity reserved for uncertainty as the degree of uncertainty diminishes moving toward real-time; (5) modify the proposal to ensure that monthly adjustments to TRM cannot degrade existing wheeling through reservations; (6) modify the proposal to limit the use of unreserved monthly wheeling through ATC to support LSE contracts at T-30; and (7) explain the conditions under which it is reasonable for load conformance to cause the pro-rating of existing wheeling through reservations and modify the proposal to align with these conditions.