



Memorandum

To: ISO Board of Governors and WEIM Governing Body
From: Anna McKenna, Vice President of Market Policy and Performance
Date: January 26, 2023
Re: **Decision on Transmission Service and Market Scheduling Priorities Phase 2**

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

EXECUTIVE SUMMARY

Management proposes to implement a durable framework for establishing market scheduling priority for transactions that wheel through the ISO balancing area to serve external load. The proposed framework replaces the current framework approved by FERC that is set to expire on June 1, 2024. Under the proposed design the ISO would calculate available transfer capability (ATC) on its interties that would be available to parties to reserve and establish wheel through scheduling priority equal to ISO load. In calculating the ATC, the ISO would set aside transmission capacity for forecasted or estimated native load needs, including load growth, and establish a Transmission Reliability Margin (TRM) to account for different elements of uncertainty.

Management further proposes a process through which wheel through customers can request and access limited ATC that may be available on the intertie. The process requires them to demonstrate they have a firm power supply contract to serve external load or a contract conditioned on their ability to obtain ATC. The process includes defined reservation windows in which interested external entities can submit requests to compete for limited ATC. The proposed design also includes transmission planning and study process enhancements to permit external entities to request wheel through scheduling priority on a long-term basis of one year or longer in duration. These requests would be studied along with other requests for long-term transmission service. If a transmission upgrade is needed, entities could elect to fund transmission upgrades and obtain the wheel through scheduling priority across the ISO system.

Finally, Management proposes that entities that reserve ATC in advance for high priority wheel through service will be assessed transmission charges based on the underlying duration of their supply contract, regardless of whether the transaction is scheduled, to reflect the value the higher priority provides.

The proposed design provides a reasonable bridge between the Open Access Transmission Tariff (OATT) framework and the current ISO market structure. The proposal provides open access to the ISO transmission system while protecting native load needs similar to the practices of other western transmission providers, while considering the unique characteristics of the ISO's market framework.

The proposal described in this memorandum falls under the ISO Board of Governors' approval authority with the WEIM Governing Body serving in an advisory role.

WEIM Governing Body motion

Moved, that the WEIM Governing Body advises the ISO Board of Governors, as discussed in the February 1, 2023 joint general session meeting, that it supports / does not support Management's proposal pertaining to transmission service and market scheduling priorities phase 2 as described in the memorandum dated January 26, 2023.

Board of Governors motion

Moved, that the ISO Board of Governors approve Management's proposal pertaining to transmission service and market scheduling priorities phase 2 as described in the memorandum dated January 26, 2023; 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 these changes, 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

As a result of operational challenges faced on the ISO grid in the summer 2020, the ISO conducted an expedited stakeholder initiative - *Market Enhancements for Summer 2021 Readiness* - that evaluated market enhancements in anticipation of challenging system conditions in summer 2021. The enhancements FERC approved in June 2021 included an interim process for establishing wheel through scheduling priorities. In approving the

ISO's proposal, consistent with prior stakeholder feedback, FERC encouraged the ISO to develop a durable process that identifies how much transmission capacity is needed to meet native load needs and identifies the amount of transmission capacity that can support wheel through transactions across the ISO system.

The interim framework currently in place permits entities to establish wheel through scheduling priority equal to ISO load if the following defined requirements can be met: (1) demonstration of a firm power supply contract to serve an external load serving entity's load throughout the month; and (2) firm transmission for the month reserved to the ISO border. Some external load serving entities have expressed that this framework is onerous and challenging, in part, due to the imposition of firm transmission requirements to the ISO border. They have expressed concern that this requirement does not enable them to establish wheel through priority for periods of less than a month, which they need to manage unexpected changes in conditions. Internal load serving entities also have found the framework challenging and potentially risky because it allows entities to establish a wheel through scheduling priority without considering how much available transmission capacity is available to support high priority wheel through volumes. Wheel through transactions unable to meet the requirements for establishing a wheel through priority have a lower scheduling priority across the ISO system for purposes of effectuating schedule curtailments or adjustments.

In July 2021, the ISO launched the transmission service and market scheduling priorities initiative separated into two phases. The first phase of the initiative resulted in a two-year extension of the interim wheel through scheduling priorities framework which extended the framework through May 31, 2024. Phase 2 of the initiative proposes a durable framework for establishing wheel through scheduling priority that, in accordance with FERC guidance, protects native load by setting aside transmission capacity for native load needs and load growth, while making the remaining transmission capacity available for reservation in advance to establish wheel through scheduling priority.

PROPOSAL

Management's proposal addresses and responds to stakeholder needs that can evolve over time with operational experience. To that end, the design includes the calculation of available transfer capability (ATC) at the ISO interties across different time horizons. This ATC is then made available for advance reservation to support wheel through transactions that would have a priority equal to import transactions serving ISO load. Management proposes that in calculating ATC the ISO would first set aside an amount for forecasted/estimated native load needs, load growth, other existing contractual commitments, and an amount of transmission to account for uncertainty in conditions that may materialize. The remaining transmission – the ATC – would be made available for reservation to eligible entities to establish a wheel through scheduling priority.

Management further proposes to leverage and extend the ISO's transmission study processes to study requests for establishing wheel through scheduling priority on a

long-term basis of a year or longer. This will allow entities to submit a request for long-term, high priority wheel through transactions. The ISO will study such requests to determine if transmission upgrades across the ISO system are necessary to secure the wheel through scheduling priority.

Management also proposes a transmission compensation framework for establishing high priority wheel through schedules to account for their value and differentiate them from lower priority self-schedules. Management proposes to assess high priority wheel through schedules the current transmission charge – the wheeling access charge – based upon the duration of the underlying supply contract that supported the wheel through scheduling priority. The ISO would assess this charge whether or not the transaction is scheduled to utilize the priority for that period. This approach fairly values the higher scheduling priority without dramatically changing the transmission rates currently in place on the ISO system.

The components of the proposed design are discussed in more detail below.

Calculating available transfer capability (ATC)

Management proposes to calculate the ATC across a 13-month rolling horizon in monthly increments, and a 7-day rolling horizon in daily increments. The ability to access ATC across these time horizons will help bridge seams with other transmission providers across the West that have OATT transmission frameworks that allow the reservation of transmission service across similar horizons.

In calculating ATC across an intertie, like other balancing authority areas, the ISO would consider the total transfer capability of the intertie and then subtract existing transmission commitments and margins. The resulting ATC would be available for reserving wheel through scheduling priority across the ISO system. Existing transmission commitments include the transmission capacity needed for existing transmission contracts and native load needs. Existing transmission contracts are legacy transmission arrangements that reduce the amount of ATC available for reservation. The native load component of the calculation is a critical component that represents the transmission capacity needed to serve the ISO native load, including load growth.

Management proposes that, for the purpose of calculating ATC across a forward 13-month horizon, the ISO will determine the transmission capacity to set aside for native load needs for a particular month based upon the highest volume of import supply contracted by ISO load serving entities for that month during the previous two years. The import supply would be based upon both contracted imports shown on resource adequacy plans and contracted imports that may not have been shown on resource adequacy plans. For example, in calculating ATC and estimating native load needs for September 2024, the ISO will consider the historical import volumes under contract shown for September 2023 and September 2022 and use the higher of the two values. In addition, the ISO will develop a new process to permit load serving entities to indicate

the existence of import contracts in addition to those shown on resource adequacy plans to inform the amount of capacity to set aside for expected native load needs. This information would be provided to the ISO by the time the ISO first calculates ATC for a particular month (*i.e.*, 12-13 months in advance). Once the actual monthly resource adequacy showing plans are finally submitted, at 30 days prior to the start of the month, the ISO will “true-up” the historical data assumptions used to set aside capacity for native load needs to reflect the actual showings of contracted imports (both resource adequacy imports and contracted imports not shown on resource adequacy plans). This could affect the ATC that is available for reservation in the daily horizon.

Using historical data to estimate future native load needs at the interties supports the existing resource adequacy paradigm applicable to ISO load serving entities whereby import supply is procured primarily in the month-ahead timeframe to meet the month-ahead resource adequacy detailed showings. Because ATC is calculated across a 13-month horizon, the design must rely on historical imports under contract as a reasonable estimation of native load needs. This historical approach to estimating native load needs is in line with the wide and different range of approaches transmission providers use across the West. In particular, to the extent sufficient supply is not under contract at the time of calculating ATC and native load needs, some of the other transmission providers estimate or forecast where that additional supply will be contracted to serve native load.

Management also proposes use of a transmission reliability margin (TRM) to set aside transmission capacity for uncertainty that may materialize. TRMs are governed by NERC requirements and are standard components of the overall ATC methodology across the industry that allows a transmission provider to set aside transmission capacity for different types of uncertainty. The TRM is an important element of the ATC so that when uncertainty materializes that capacity can be utilized to serve load and maintain system reliability.

Management proposes that the ISO will conduct an annual assessment, through a powerflow and similar analysis, to evaluate the impacts of wheel through transaction flows on the internal transmission system and will test for any adverse reliability impacts. Similarly, before publishing ATC values for the summer months across a 13-month horizon, the ISO will hold a stakeholder process to preview ATC values and discuss the different assumptions informing those numbers based on the proposed methodology.

Accessing and reserving ATC

Management proposes that entities seeking to reserve ATC in advance to establish wheel through scheduling priority must demonstrate the existence of a power supply contract to serve external load. In particular, the entity seeking to reserve ATC must demonstrate that it has an executed firm power supply contract to serve external load, a firm power supply contract to serve external load where execution is contingent upon the availability of ATC on the ISO’s system, or demonstration of ownership of the

resource to serve external load. The contractual requirement is an extension of the current requirement under the interim framework and is intended to help ensure limited transmission capacity is accessible to those entities that need it to serve their load.

Management proposes reservation windows during which requests are submitted and entities seeking wheel through scheduling priority can compete, if necessary, for limited ATC. Under this proposed design, there will be reservation windows in both the monthly timeframe and the daily timeframe for accessing ATC across the horizon for which ATC has been calculated. If there is insufficient ATC to accommodate all submitted requests, the priority to such limited ATC will be granted based on the number of hours for which the priority is sought based upon the underlying duration of the supply contract. Thus, requests for ATC supported by an underlying supply contract with more hours would obtain the limited ATC over a request with a shorter set of hours. For example, a requestor with a 6x16 (6 days a week, 16 hours a day) supply contract would obtain ATC over another requestor with a 6x8 supply contract at the same intertie if there was insufficient ATC to meet both requests. At the conclusion of the submission windows, once a requesting party is granted ATC, it has certainty that it has established the wheel through scheduling priority. Entities that have established wheel through priority will also be able to resell this priority.

Establishing long-term wheel through scheduling priority & study process

Management proposes to introduce a process through which entities seeking to establish wheel through scheduling priority on a long-term basis, i.e., for a year or longer, can submit a request for the ISO to conduct a study to determine whether there is sufficient transfer capability available for the requested period or whether a transmission upgrade is needed. This process complements the short-term calculation of ATC because it enables entities to seek to establish the wheel through scheduling priority beyond the 13-month horizon and establish it for multiple years if necessary.

To support the study process, the ISO would leverage aspects of its existing generator interconnection process. In particular, the interconnection process includes a deliverability study the ISO would leverage for long term wheel through requests. Requests for long-term wheel through scheduling priority would be included in the existing annual interconnection process deliverability cluster study with other deliverability requests. The study would determine whether the request can be supported by the existing facilities or whether a transmission upgrade on the intertie or across the internal network is necessary to accommodate the request. If it can be accommodated without an upgrade, the ISO would grant the request, and the requestor would establish wheel through priority and pay the wheeling access charge for transmission. However, if the ISO cannot accommodate the request, the study will identify a plan of service, including the nature and cost of transmission facilities to be upgraded. The requestor can then determine whether to pursue the upgrade. If the requestor pursues the transmission upgrade option, it will be responsible for funding the transmission upgrade utilizing a transmission credit approach or a comparable

approach consistent with FERC policy. The ISO will develop the implementation details for this framework in the tariff drafting process.

Transmission compensation for wheel through scheduling priority

Management proposes that priority wheel through scheduling transactions pay for transmission service across the ISO system based upon the underlying duration of the supply contract that will be delivered across the ISO system. For example, an entity that has reserved ATC with a 6x16 supply contract to support a priority wheel through transaction across the ISO system would be charged the existing wheeling access charge rate for 6 days a week, 16 hours a day, whether or not the transaction is scheduled. This compensation design reflects the value of having a wheel through scheduling priority compared to lower priority wheel through transactions, which are assessed transmission charges only when they are scheduled.

Application of scheduling priority in the post-HASP process

In the event that there is insufficient transmission to support priority wheel schedules and serve ISO load, under the current framework, the ISO uses a post-HASP process to perform pro-rata schedule adjustments between priority wheel through transactions and ISO load transactions. Management's proposal for calculating ATC on the interties and capping priority transactions at an intertie's total transmission capability will decrease the risk that the post-HASP process will be needed. Today, the interim design does not consider ATC when establishing wheel through priority, which makes it possible for the sum of priority wheel through transactions and ISO load to exceed the total capability of the intertie. This can lead to over-scheduling of these transactions and trigger the pro-rata curtailment of these transactions.

Management proposes to update the inputs to the post-HASP process. In anticipation of stressed grid conditions, the ISO may procure additional import capacity through the capacity procurement mechanism (CPM). Management proposes that CPM import supply be included as part of the "ISO load" component of the post-HASP process if there is remaining ATC that has not been previously reserved, or there is sufficient TRM to support delivery of the CPM import supply. If there is insufficient ATC or TRM to support the CPM import supply, and the post-HASP process is triggered, the CPM import schedules would not be protected within the pro-rata adjustment between priority wheel through transactions and ISO load.

Management contracted the services of Open Access Technology International (OATI) as a consultant on the initiative and they have provided a written opinion on discrete elements of the proposal: the set aside of transmission capacity for native load and the TRM. Their opinion cites a range of different transmission provider practices across the West and concludes that Management's proposal on these elements is a reasonable starting point and consistent with the range of practices of sampled transmission providers.

STAKEHOLDER POSITIONS

Overall, stakeholders expressed support for pursuing an approach that replaces interim design requirements for establishing wheel through scheduling priority with transparently calculating ATC to determine transmission availability, protect native load needs, and enable customers to establish scheduling priority in the monthly and daily timeframes.

While some stakeholders expressed support for the proposed calculation of ATC, others expressed concerns with certain elements of the formulation. For example, one concern was with basing the calculation of native load on historical contracted values, as opposed to supply under contract. Another concern was that the historical approach may overestimate the native load needs. Some stakeholders noted that it is a reasonable or acceptable design as a starting point, but the ISO should monitor and be prepared to evolve the calculation with operational experience. Management believes the proposed design for calculating native load needs is reasonable and consistent with the range of different practices employed by transmission providers in the West, and it would be overly restrictive and inconsistent with the existing resource adequacy framework to base the set-aside of transmission capacity on contracts executed more than a year in advance.

Stakeholders also generally supported retaining the contractual requirement to access ATC and providing additional flexibility regarding what contracts count toward meeting that requirement. Nevertheless, some stakeholders expressed concern about or opposed the requirement, stating that a contract is not required under the OATT to reserve transmission in advance. The contractual requirement is consistent with the interim FERC-approved design, and it ensures that entities with an imminent need for the capacity to serve their load, demonstrated through execution of a power supply contract, can access limited ATC.

Stakeholders generally found the proposed compensation framework for priority wheel through customers reasonable or noted they did not oppose the proposed design. Some of those stakeholders recognized that the design did not go as far as they would have preferred, but it was favored over the existing design where priority wheel through transactions pay for transmission only when the transaction is scheduled. Management proposes the ISO will monitor the proposed compensation design and consider different approaches in the future, recognizing that any approaches that attempt to change the rate structure will likely require extensive stakeholder discussion.

Finally, several stakeholders sought clarity and expressed concern that the wheel through scheduling priority established on the ISO system may not be comparable or of the same quality as the priority established for firm transmission service under the OATT. This is an important issue for several stakeholders as they evaluate not only their own risk tolerance, but also the compatibility of the wheel through scheduling priority with other emerging regional programs, particularly the Western Resource Adequacy Program (WRAP) that requires a large portion of the resource adequacy

supply be deliverable on firm transmission. The final proposal discussed when priority wheel through transactions are primarily at risk of being triggered: (1) there is a supply insufficiency in the ISO area such that there is a power balance infeasibility in the market (*i.e.*, insufficient supply to serve load); and (2) a transmission limitation on an intertie. If these conditions are present, and there is no additional supply available to the market across any other intertie than the one experiencing a limitation, the ISO will first adjust economic schedules and low priority transactions. Only if additional relief is needed would post-HASP pro-rata curtailments occur. Management noted that this confluence of conditions is infrequent, even under stressed system conditions. The ISO has not curtailed a single priority wheel through transaction since inception of the wheel through priorities in summer 2021, even under stressed supply shortfall conditions. Moreover, the introduction of an ATC calculation on the interties further reduces the risk of the post-HASP process being needed due to overscheduling since the amount of priority transactions cannot exceed the intertie's total transmission capability. This denotes the high confidence in, and reliable nature of, high priority wheel through transactions across the ISO system. The level of priority, confidence, and reliability of priority wheel through transactions is comparable, if not superior, to firm transmission service under the OATT.

CONCLUSION

Management requests the WEIM Governing Body advise the ISO Board of Governors of their support for the proposal, and that the ISO Board of Governors approve Management's transmission services and market scheduling priorities phase 2 proposal described in this memorandum. This proposal will create a durable framework for wheel through scheduling priorities in the ISO markets while effectively accounting for transmission capacity needed to serve native load.