
I. MOTION TO INTERVENE

DMM respectfully requests that the Commission afford due consideration to these comments and motion to intervene, and afford DMM full rights as a party to this proceeding. Pursuant to the Commission’s Order 719, the CAISO tariff states “DMM shall review existing and proposed market rules, tariff provisions, and market design elements and recommend proposed rule and tariff changes to the CAISO, the CAISO Governing Board, FERC staff, the California Public Utilities Commission, Market Participants, and other interested entities.”¹ As this proceeding involves CAISO tariff provisions that would affect the efficiency of CAISO markets, it implicates matters within DMM’s purview.

¹ CAISO Tariff Appendix P, Section 5.1.
II. SUMMARY

In this filing CAISO includes proposed tariff revisions originating from its recently approved Transmission Service and Market Scheduling Priorities – Phase 2 stakeholder initiative.\(^2\) The tariff revisions proposed in this filing will address: (1) the calculation of available transfer capability in monthly and daily increments, (2) accessing available transfer capability, (3) the application of scheduling priorities in a *pro rata* curtailment process that may be triggered under specific conditions following CAISO’s hour-ahead market, the hour-ahead scheduling process (HASP), and (4) a compensation framework for wheeling through scheduling priorities.\(^3\)

DMM supports the CAISO’s proposed tariff revisions as an improvement from the interim rules for high priority wheeling access, which are set to expire on June 1, 2024. The proposal appears to strike a balance between the preferences and needs of CAISO load serving entities and those of external users of the CAISO transmission system.

However, CAISO’s proposed tariff revisions establish transmission service rules that differ in several notable ways from the standard OATT framework. Among the most notable differences between CAISO’s proposed revisions and the OATT framework is that the CAISO does not propose to explicitly consider internal transmission flow impacts in the calculation of available transfer capability (ATC) available to support wheel through transactions. Further, the CAISO proposes to remove the possibility that north to south


congestion on Path 26 within the CAISO system could be used to trigger the post-HASP \textit{pro rata} curtailment process.

In light of these aspects of the proposal, DMM’s support of the CAISO’s proposed ATC calculation is based on the understanding that the CAISO’s proposed annual power flow analysis and transmission reliability margin (TRM) review will fully incorporate the risk of potential internal transmission line derates and other causes of internal congestion into the transmission reliability margin. Under the CAISO’s proposed design, the CAISO management and staff responsible for the balancing authority area’s reliability must set the transmission reliability margin sufficiently high in all ATC reservation windows. The CAISO balancing area must set the transmission reliability margin high enough to limit the capacity on internal transmission paths that could be used by high priority wheels to only the capacity on each path that CAISO balancing area native load will not need for reliability after considering potential derates or other causes of congestion on internal paths.

DMM notes that future refinements to CAISO’s high priority wheeling access rules to explicitly consider the internal transmission flow impacts of wheeling may benefit the reliability of entities both within and outside the CAISO balancing area. This would provide greater assurance of the reliability of the CAISO balancing area, while also decreasing the likelihood that high priority transmission rights made available by the CAISO would be subject to \textit{pro rata} curtailment when there is also a transmission limitation on the intertie.

DMM also has some concerns that the CAISO’s proposed revisions do not hold entities financially responsible for transmission reservations if terminated eleven or more
business days before the commencement of service. DMM recommends that the CAISO consider a future refinement to the proposed revisions that would create stronger financial incentives for entities to only procure transmission which they are likely to use.

III. COMMENTS

DMM supports the concept of calculating ATC and only allowing high priority wheel through transactions up to the available ATC limit.

The approach of limiting high priority wheel through transactions to available transfer capability (ATC) is generally consistent with DMM’s understanding of the practices of other transmission providers. This approach represents a significant improvement over the interim rules for high priority wheel through transactions. However, CAISO’s proposed approach for determining ATC focuses only on intertie import capacity and excludes internal CAISO transmission constraints. DMM understands that other transmission providers in the west determine ATC and sell transmission service on a point-to-point basis that considers the complete transmission path, including flows on internal transmission constraints.

Based on DMM’s understanding of the standards of other transmission providers in the west, the ATC for high priority wheeling on the CAISO grid should only be available up to the amount of the most limiting element of the wheeling path, as determined by a transmission planning study and available intertie capacity. If in practice the intertie transfer constraint is likely to be the binding transmission element on the wheeling path, further assessment of the internal flow impacts may make little difference in the resulting ATC number. Nonetheless, excluding analysis of the impacts of wheeling through transactions on internal CAISO transmission constraints may leave some ongoing risk that the CAISO transmission system could become oversubscribed.
DMM understands that the CAISO proposes to conduct an annual power flow analysis to test the robustness of the CAISO transmission system to support imports and wheel through transactions under different system conditions. While not directly included in the ATC calculation, this may help to mitigate some of the risk that CAISO’s transmission system will become oversubscribed.

Because the CAISO’s proposal does not directly consider internal transmission flow impacts when determining ATC, DMM views the proposed annual power flow analysis as critical to ensuring the reliability of the CAISO balancing area. DMM’s support of the CAISO’s proposed ATC calculation is based upon the understanding that this proposed annual process, or other engineering studies performed as needed, will appropriately reflect in the transmission reliability margin the risk of system events that may lead to significant internal congestion and potential reliability issues. In determining the range of potential TRM values that may be used across different time horizons, CAISO management and staff responsible for the balancing area’s reliability will also have to consider that capacity released by TOR holders could increase ATC values in later reservation windows beyond those considered in the annual power flow analysis.

DMM supports the CAISO’s proposed approach to account for native load needs in the ATC calculation, and views the ability to set an appropriately conservative TRM as a crucial element to support CAISO reliability.

DMM supports the CAISO’s proposal for accounting for the needs of native load in the ATC calculation. Early in the CAISO stakeholder process, DMM suggested a potential approach to estimate the needs of native load in the calculation of existing transmission
commitments. CAISO’s proposed approach appears similar to that envisioned in DMM’s early comments, with added enhancements that further incorporate CAISO load needs and related uncertainty.

DMM supports the use of a transmission reliability margin (TRM) that can change over time to reflect, among other things, changing levels of load forecast uncertainty and uncertainty in transmission system topology on different time horizons. A TRM that can change over different time horizons will allow use of more conservative assumptions to reflect higher uncertainty in load and internal transmission path availability on more distant time horizons, and less conservative assumptions that allow the release of additional ATC as uncertainty of native load needs decreases.

Similarly, DMM understands this framework would allow the TRM to increase at any time horizon to reflect new information or increased uncertainty in native load needs. Because CAISO’s proposed ATC calculation does not directly consider internal transmission flow impacts, a flexible TRM will also be important in maintaining the reliability of the CAISO grid by reducing ATC to account for the risk of events that may create significant internal transmission congestion.

DMM believes a sufficiently flexible TRM approach is essential to ensuring the reliability of the CAISO balancing area under the proposed ATC calculation that does not directly consider internal transmission flow impacts. In addition to meeting the needs of CAISO native load, supporting the reliability of the CAISO balancing area also decreases

the risk of power balance shortfalls which, when combined with transmission limitations on an intertie, could lead to pro rata curtailment of high priority wheel through transactions.

**CAISO’s proposed approach to access ATC differs from that of the standard OATT framework, but may support the reliability of the CAISO system in the context of the proposed ATC calculation.**

The CAISO proposes that ATC will be available to entities seeking to establish high priority wheeling on a first come, first served basis within established request windows. DMM supports this approach as consistent with DMM’s understanding of the practice of other transmission providers.

To purchase ATC for high priority wheels, the CAISO is proposing that entities be required to demonstrate one of the following types of contracts to serve external load: (1) an executed firm power supply contract to serve external load, (2) a firm power supply contract to serve external load where execution is contingent upon the availability of wheeling through scheduling priority on the CAISO system, or (3) ownership of a resource that is contracted to serve external load.

The OATT framework used in other balancing areas does not require entities to have such contractual obligations prior to purchasing available firm transmission. DMM has previously noted that this requirement could prevent the sale of some ATC that remains available after sales to entities with contractual obligations to serve load, and that the contractual limitation should not prevent such sales. However, this logic is conditional on the assumption that ATC reflects fully excess capacity, and that transactions scheduled on that ATC would be simultaneously deliverable with all other firm uses of the intertie.
In recent comments filed by the CAISO at the California Public Utilities Commission (CPUC), the CAISO notes that the total transfer capacity (TTC) across all CAISO interties is not simultaneously deliverable to CAISO load.\(^5\) CAISO also states that although the total TTC is not simultaneously deliverable to CAISO load, it expects that the total volumes of resource adequacy imports and priority wheel through transactions will remain in line with historical levels, which are far less than the combined TTC.

The amount of import resource adequacy capacity a CAISO load serving entity may source from a given intertie is limited by the maximum import capability (MIC) available at that intertie. The MIC capacity is that determined by CAISO’s MIC process to be simultaneously deliverable to CAISO load, and is a quantity less than the TTC at the intertie. However, because CAISO’s proposed ATC calculation does not consider the internal transmission flow impacts of ATC used to support wheel through transactions, there is a potential that if all available ATC were used to support high priority wheel through transactions at volumes exceeding historical high priority wheel through volumes, that all firm uses of a particular intertie may no longer be simultaneously deliverable.

CAISO states in the recent CPUC comments that because it does not expect a significant change in the volume of high priority wheel through transactions across the CAISO system compared to historical volumes, the proposed ATC process should not

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displace or augment the existing MIC process that ensures simultaneous deliverability of resource adequacy imports.\textsuperscript{6}

The CAISO’s proposed requirement of a contractual arrangement to access ATC is one of the reasons the CAISO states in its CPUC comments that it does not expect a significant change in the volume of high priority wheel through transactions compared to historical levels.\textsuperscript{7} Therefore, to the extent that the requirement of a contractual arrangement to access ATC facilitates the simultaneous deliverability of all firm uses of CAISO intertie capacity, DMM supports this requirement to support the reliability of the CAISO system.

The CAISO also proposes to allow CAISO load serving entities to access ATC on the daily timeframe, in addition to the portion of ATC already set aside for native load needs. The use of ATC to support resource adequacy import capacity may not be appropriate due to the simultaneous deliverability concerns addressed above. However, DMM supports allowing CAISO load serving entities to access ATC on the daily timeframe as a means of reflecting near term native load needs that may not be fully reflected in the daily ATC calculation.

\textbf{Increasing ATC through the use of converted ETC or TORs may contribute to internal CAISO transmission congestion. The TRM process must be flexible enough to account for the impacts of potential conversion of ETCs or TORs in later ATC reservation windows.}

The CAISO proposes that a scheduling coordinator may use ETC or TOR capacity to support a wheeling through priority. DMM does not oppose this proposal when the associated high priority wheels are limited to the import and export points specified by the

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ETC or TOR. Allowing ETCs or TORs to support high priority wheel through transactions that import at the point associated with the ETC or TOR, but export at a point unassociated with the ETC or TOR, could contribute significantly to unanticipated internal congestion on the CAISO transmission system and threaten CAISO balancing area reliability.

In addition to allowing scheduling coordinators to use ETCs or TORs to directly support a wheeling though priority, the CAISO’s proposal allows a TOR holder to release that capacity to the CAISO pursuant to a contract, and that the CAISO will then release that capacity as ATC available for new firm use. By increasing ATC at an intertie to support wheel through transactions without also considering additional internal transmission congestion impacts, this may contribute to additional internal transmission congestion and potentially impact the reliability of the CAISO balancing area.

The transmission reliability margin design proposed by the CAISO allows for TRM to change over different time horizons to reflect changing levels of uncertainty under different time horizons. Although the level of the TRM may change on different time horizons, the CAISO proposes to assess the components of the TRM and conduct an annual power flow analysis only on an annual basis.

In order to ensure that the ability to create additional ATC through TOR conversion does not create a loophole to access additional high priority wheeling capacity, the CAISO’s annual power flow analysis and assessment of TRM must consider the potential of a high priority wheel through volume that includes any potential TOR rights that could be later converted to ATC. The TRM should be able to adjust as needed to consider a higher amount of ATC made available by the conversion of TORs. The CAISO’s policy
must avoid the scenario where the ATC is significantly reduced or completely unavailable due to reliability concerns, but a holder of a TOR can release that right to create additional ATC that is unable to be appropriately reduced by a TRM that does not consider the higher amount of ATC created by the TOR conversion.

The proposal to retain a modified post-HASP curtailment process is appropriate to support the reliability of the CAISO grid under certain extreme system conditions.

The CAISO market is a mathematical optimization that manages congestion on the overall transmission system. For hourly block intertie transactions, the real-time market manages congestion through the hour-ahead scheduling process (HASP). One of the key benefits of a centralized market over a bilateral point-to-point transmission construct is the ability to re-dispatch resources and manage congestion based on economic optimization rather than manual processes or pro rata cuts. In the CAISO system, much – if not most – of the congestion due to transmission de-rates is managed by this market optimization. DMM notes that this market-based approach is likely in many cases to avoid curtailment of high priority wheel through transactions due to transmission derates, whereas these transactions may have been subject to curtailment under the standard OATT framework. This is a difference from the standard OATT framework, but one that may ultimately benefit transmission customers with high priority wheel through transactions.

The CAISO’s proposal further states that under certain extreme conditions, when there exists both a CAISO power supply shortfall and a transmission limitation on the intertie, the CAISO will perform a post-HASP pro rata allocation of available intertie transmission capacity between CAISO load and priority wheeling through transactions.
DMM believes the post-HASP process is an appropriate tool to support the needs of CAISO load during extreme system conditions, and reflects the ways in which CAISO’s centralized market structure differs from a bilateral market and point-to-point transmission framework.

When intertie transmission capacity is derated or otherwise limited and all low priority transactions have been curtailed, market scheduling priorities alone may allocate all remaining intertie transmission capacity to imports supporting high priority wheel through transactions, and little or none to import transactions serving CAISO load. This is a departure from the OATT framework, which would *pro rata* curtail all firm uses across a transmission path if further relief were needed after eliminating all non-firm uses.

From a system reliability perspective, this outcome may not be inherently problematic unless it causes or occurs concurrent with a CAISO system power supply shortfall. The post-HASP process ensures that if this market scheduling outcome causes or occurs concurrent with a CAISO power supply shortfall, CAISO load may access a *pro rata* share of import capacity available at the intertie in order to resolve some or all of the supply shortfall.

While DMM supports inclusion of the post-HASP process as proposed, we note that the CAISO proposes to remove consideration of internal north-south CAISO congestion on Path 26 as a criteria that could trigger the process. Because a significant amount of CAISO resource adequacy capacity relies on this transmission to reach load centers in Southern California, and because many of the high priority wheel through transactions are expected to flow north to south, retaining this criteria could be a valuable tool to further support CAISO system reliability during high load conditions where the
import intertie is not experiencing a transmission limitation, but Path 26 is the limiting transmission element. This is especially so because the CAISO’s proposed ATC calculation does not explicitly consider internal transmission flow impacts – outside of its implicit inclusion as part of the transmission reliability margin discussed above. The proposed ATC calculation explicitly considers only the ATC available at the import intertie.

The CAISO’s proposed framework reflects policy tradeoffs that may not always provide lower curtailment risk to high priority wheel through transactions than that provided by the standard OATT framework.

Given the same derate of identical transmission elements on two different transmission systems, firm uses on the system where the transmission element has a higher amount of firm uses are more likely to be subject to curtailment, since fewer non-firm transactions will be available to curtail first to meet the derated limit. Because the CAISO’s proposed ATC calculation does not explicitly consider the internal transmission flow impacts, the calculation has potential to allow more ATC available to support high priority wheels than would otherwise result from a calculation more analogous to the OATT framework that considers internal flow impacts. Therefore, without the additional requirement of a CAISO power supply shortfall to trigger the post-HASP process, this may imply a higher likelihood of curtailment.

The additional requirement of a CAISO power supply shortfall to trigger the post-HASP process may make curtailment in the context of a transmission limitation less likely than the OATT framework under typical operating conditions. However, during peak hours

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8 Standard transmission curtailment priorities dictate the curtailment of all non-firm uses before making pro rata curtailments of firm uses. As noted in the Transmittal Letter (pp. 76-77), the likelihood or risk of curtailment of firm service depends in significant part on the volume of non-firm transmission on the path. When less non-firm service is scheduled, there is a higher likelihood that needed relief will be obtained by curtailing firm transmission service.
under high load conditions when CAISO market power supply shortfalls are most likely to occur, curtailment may be no less likely than similar conditions under the OATT framework. Further, because the potentially higher volume of firm uses that may be allowed under the CAISO’s proposed approach leaves fewer low priority transactions to curtail, the curtailment risk of high priority wheel through transactions has potential to be slightly higher under high load conditions than under the OATT framework that may make less ATC available by explicitly considering internal transmission flow impacts. Therefore, CAISO’s proposed revisions include a combination of design features that have potential to make slightly more available transfer capacity (ATC) available, but may also make this transfer capacity somewhat less firm under certain extreme system conditions.

DMM supports the CAISO’s proposal as an improvement over the existing interim rules for high priority wheel through transactions, but we also note that the CAISO could have made different policy choices that would have still improved over the interim rules and may have achieved a framework more analogous to the standard OATT framework.

**Evaluating internal transmission flow impacts in the ATC calculation could benefit all users of the CAISO transmission system.**

DMM supports CAISO’s proposal as an improvement to the interim rules for high priority wheel through transactions. However, conducting a more robust analysis of the impact of high priority wheel through transactions on internal transmission flows could benefit the reliability of entities both within and outside the CAISO balancing area. Assessment of internal transmission flow impacts in the ATC calculation could reduce the risk of CAISO power balance shortages caused by internal congestion, particularly on the major north-south transmission constraints on the CAISO grid (e.g. Path 26). This would provide greater assurance of the reliability of the CAISO balancing area, while also
decreasing the likelihood that high priority transmission rights made available by the CAISO would be subject to *pro rata* curtailment when there is also a transmission limitation on the intertie.

**Uncapped prices for resale of high priority wheeling rights may allow exercise of market power.**

The CAISO proposes to allow resale of high priority wheeling rights for the same duration and quantity as the underlying supply contract used to secure the rights. DMM supports this proposal and understands the ability to resell transmission rights to be consistent with the rules of other transmission providers.

In the CAISO stakeholder process, DMM suggested that the CAISO establish and codify a rate at which transmission scheduling priority can be resold — consistent with DMM's understanding of the practices of other transmission providers. The CAISO did not adopt this suggestion, but committed to monitoring resale transactions and considering additional requirements for resale in the future.

DMM suggests that the CAISO remain open to the possibility of establishing a rate for resale in future initiatives. In the absence of an established resale rate or price cap, there remains some risk of market power in the resale of ATC by entities that may be able to acquire large amounts of high priority wheeling rights in early reservation windows, and sell at an inflated price at a later time. This concern is exacerbated by the fact that under the CAISO’s proposal there is no financial risk associated with reserving high priority wheel through rights, since the reserving entity is not obligated to pay for the rights if the underlying power supply contract is terminated or modified. This will allow an entity to essentially acquire a free option on high priority wheel through access, which it can sell or utilize if the market value is high, or else release back to the CAISO at no cost within
just eleven business days prior to the start of the reservation period. This concern is discussed in more detail below.

DMM supports a full payment for all hours of scheduling priority, regardless of use.

The CAISO proposes that high priority wheeling through transactions pay for transmission scheduling priority based on the quantity and duration of the priority, as determined by the underlying power supply contract to serve external load. Payment of the WAC (wheeling access charge) would be required for the full duration of the contract, independent of market schedules and whether the rights are utilized. This approach is distinct from the interim approach to establish high priority for wheel through transactions where WAC is only paid when the priority is exercised.

DMM supports the concept of a fully paid charge to establish scheduling priority for the full duration of the load serving contract. DMM does not oppose the CAISO’s proposal to use the WAC for this purpose, paid in proportion to the reserved priority hours. This approach appropriately reflects the value of access to high priority scheduling, where compensation increases for additional hours of scheduling priority reflecting additional value. This approach is also consistent with DMM’s understanding of the practices of other transmission providers which impose a charge for establishing transmission rights, even when not exercised.

DMM suggests that as a future refinement, the CAISO hold entities financially responsible for reserved ATC when the underlying contract is modified or terminated.

The CAISO proposes to terminate high priority wheel through rights if the underlying power supply contract used to acquire the rights is terminated or modified in a
manner that is inconsistent with the reservation. If the contract termination occurs eleven or more business days prior to the beginning of the period in which the rights may be used, the CAISO’s proposed revisions relieve the purchasing entity of financial responsibility associated with the transmission reservation. The associated ATC is released as ATC that could potentially be used by other entities.

By allowing a refund or relief of financial responsibility, CAISO’s proposed policy creates adverse incentives to acquire transmission that the reserving entity may not intend to use. Essentially, the entity can acquire a free option on the high priority wheel through access, since the entity is not required to resell the reserved quantity, but can simply get a refund if the contract is terminated at a later time. There is no financial risk associated with reserving high priority wheel through rights when there is a way for the reserving entity to terminate or modify the underlying power supply contract.

DMM understands that many contracts have financial penalties associated with termination or non-performance, and that contracts cannot typically be unilaterally modified. However, the availability of a free option dependent on contract termination creates incentives to establish contracts that could be more easily terminated or modified. Further, acquiring excess transmission in early reservation windows causes transmission to be withheld potentially from other entities. Although the CAISO proposes to release transmission associated with terminated contracts as ATC available to other parties, depending on when the termination occurs, the release may be too late to be of use to other parties procuring capacity in advance.

DMM suggests that as a future revision, the CAISO hold entities financially responsible for reserved ATC, even when the underlying contract is modified or
terminated. This approach could allow the reserving entity to retain a transmission right that could then be resold to another entity, at a price that DMM recommends be established in the CAISO tariff. This approach would eliminate the free option created by CAISO’s current proposed revisions, and provide proper financial incentives for entities to only acquire transmission that they are very likely to use, supported by robust contracts that cannot be easily terminated.

IV. CONCLUSION

DMM respectfully requests that the Commission afford due consideration to these comments as it evaluates the proposed tariff provisions before it.

Respectfully submitted,

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Dated: August 18, 2023
CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service lists in the above-referenced proceedings, in accordance with the requirements of Rule 2010 of the Commission’s Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 18th day of August, 2023.

/\s/ Aprille Girardot
Aprille Girardot