

PACIFICORP'S SUPPLEMENTAL COMMENTS ON THE EIM YEAR 1 ENHANCEMENTS ISSUE PAPER AND STRAW PROPOSAL, JANUARY 8, 2015 STAKEHOLDER MEETING, AND JANUARY 30, 2015 TECHNICAL WORKSHOP

I. INTRODUCTION

PacifiCorp hereby submits the following supplemental comments to the California Independent System Operator Corporation ("ISO") for its Energy Imbalance Market ("EIM") Year 1 Enhancements Stakeholder Process on the Issue Paper and Straw Proposal dated November 10, 2014 ("Straw Proposal"). These comments are supplemental to the comments submitted by PacifiCorp December 8, 2014 and January 26, 2015, and contain additional comments on the ISO's January 30, 2015 technical workshop webinar. PacifiCorp appreciates the opportunity to provide these supplemental comments on this initiative for the ISO's consideration.

II. COMMENTS

A. Establishment of EIM Transfer Limits Using ATC

PacifiCorp provided comments on this proposal in its December 8, 2014 and January 26, 2015 submitted comments and incorporates those comments herein without restating them in full. PacifiCorp does reiterate however, that while it generally supports the ISO's proposal to use scheduling mechanisms similar to those currently used in its hour ahead scheduling process ("HASP") to account for Available Transfer Capability ("ATC"), it also underscores the importance of this issue to the entry of any new EIM Entity to the EIM, potential settlement impacts to western scheduling practices and timelines, and to the ISO's longer-term initiative around a potential EIM-wide transmission rate. For example, the ISO's proposal includes the provision of ATC for EIM Transfers by EIM Entities after adjustments for any "encumbrances". Encumbrances would include capacity associated with Existing Transmission Commitments ("ETC") such as transmission contract commitments, other committed uses, etc., that will not be subject to EIM Transfers. During the ISO's January 8, 2015, stakeholder meeting stakeholders observed that the ISO is not prescribing any particular method for defining these encumbrances, suggesting instead that each EIM Entity will have discretion through its Open Access Transmission Tariff ("OATT") EIM provisions to define how ATC will be identified to the ISO for EIM Transfers. The question was raised whether encumbrances should include all firm reservations, including short-term, or be limited to long-term firm reservations. As such, both NV Energy and PacifiCorp will need to propose and define their respective EIM Transfer-ATC determination process. PacifiCorp's current mechanism for EIM Transfers does not rely on ATC,

and is instead based upon long-term firm rights made available for EIM Transfers. As such, EIM Transfers utilizing ATC would be a new mechanism for EIM Transfers between PacifiCorp's eastern Balancing Authority Area ("BAA") (PACE) and NV Energy's BAA. At this time, PacifiCorp has made no specific determination as to how it will propose to identify ATC for EIM Transfers, but would eventually put forth its proposal in the form of an OATT revision and will continue to actively participate on this issue in the ISO's Year 1 Enhancements initiatives.

A core stakeholder issue for ATC-EIM Transfers (as well as other Interchange in general) is the fact that the ISO's market model must be informed of capacity for EIM Transfers no later than T-40 before the operating hour, while the Western Electricity Coordinating Council ("WECC") e-tagging schedule deadline is not until T-20 before the operating hour. This creates the possibility that ATC identified for EIM Transfers by T-40 will be impacted by transmission customers that do not e-tag their transactions until after T-40 and up until T-20. These timing differences and EIM settlement functions, including those proposed for ATC-EIM Transfers and those that already exist in PacifiCorp's OATT for Interchange deviations, result in financial consequences through imbalance settlement charges, which have led to opposition by a limited number of stakeholders, who have greatly exaggerated and distorted the issues.

PacifiCorp would emphasize for stakeholders that the timing differences and settlement consequences created by ISO's T-40 deadline (and any complementary deadlines imposed by the EIM Entity) and the WECC e-tagging deadline of T-20 were apparent and known during the Federal Energy Regulatory Commission ("FERC") regulatory approval process for the ISO's EIM tariff as well as PacifiCorp's EIM provisions contained in its OATT. These issues were explicitly raised by PacifiCorp's transmission customers (Deseret and BPA) during those proceedings, but the Commission nevertheless ruled in favor of the proposed EIM design, stating:

As previously noted, we find that PacifiCorp's filing and the EIM Benefits Study adequately demonstrate that the EIM will provide both quantitative and qualitative benefits to PacifiCorp's customers. Accordingly, in order to realize those benefits, PacifiCorp and by extension, its transmission customers, must submit forecast data consistent with the timelines established by CAISO in order for CAISO to run its security-constrained economic dispatch. These are the same timelines applicable to supply resources in CAISO's real-time market. Thus, we find that PacifiCorp's proposal is just and reasonable and we therefore accept it. Neither Deseret nor BPA have demonstrated that maintaining the status quo is a workable option for EIM forecasts in the EIM. 147 FERC ¶61,227 at P. 191.

Accordingly, in order to understand this stakeholder issue accurately without distortion, it is important to keep in mind the fact that FERC has already weighed in on and approved the EIM design (including denying rehearing requests). The fact that the timing differences discussed here may result in settlements impacts does not, as has been suggested, result in a "confiscation" or "expiration" of any transmission rights of transmission customers; to be clear, the EIM design does not *prevent* any use of reserved or scheduled transmission rights, it simply includes

settlement consequences based upon actions or inactions. Importantly, settlement consequences for interchange imbalance can be in the form of *payments* or charges.

Notwithstanding the above commentary, PacifiCorp would strongly support any initiative by the ISO to reduce the optimization timelines and input deadlines associated with the EIM in order to reduce the timing gap between the EIM timing deadlines and the WECC T-20 scheduling deadline. Reducing this gap as much as possible would seem to have the potential to alleviate some of the stakeholder opposition around this issue. For example, if the T-40 deadline could be reduced to as much as T-22.5, this would result in input deadlines much closer to the WECC T-20 deadline.

Through these comments, PacifiCorp also clarifies that PacifiCorp's implementation of EIM Transfers on the California-Oregon Intertie ("COI") utilizing dynamic transfer capability ("DTC") is no different than any other user of COI DTC today. During the January 8, 2015, stakeholder meeting and in subsequent comments, an attempt was made to characterize PacifiCorp's EIM implementation on COI as posing a unique risk to economic efficiency and transmission utilization because of the fact that DTC must be reserved during the day-ahead preschedule timeframe and, as such, it is not known how much actual DTC will be needed for market dispatch until real-time. Notwithstanding for a moment the fact that this issue is entirely irrelevant to the ATC-EIM Transfer subject matter of the instant stakeholder initiative, this is precisely how DTC is allocated and used on COI for all users. Currently, COI DTC is administered by the Bonneville Power Administration ("BPA") as the northern path operator for COI; the same reservation, allocation and utilization process is administered by BPA to all customers requesting and using COI DTC. Importantly, non-EIM dynamically scheduled resources offered to the ISO will not be dispatched if the ISO prices are lower than the offer price of the respective resource(s); as such, there is as much uncertainty in actual real-time dispatch associated with non-EIM resources as with EIM and any attempt to specially characterize EIM as somehow different is an obfuscation. Most importantly, the concerns being offered in this context are not properly directed to the EIM design; these issues respecting dynamic use are common to WECC and specific to BPA's path operation and administration of DTC on COI.

B. Intertie Scheduling Limit Constraints in Import and Export Directions

PacifiCorp has observed an additional issue which it requests that the ISO review as part of this initiative. Currently, the ISO settlement process prescribes allocation of congestion rents on a 50/50% basis to each EIM Entity BAA at the BAA interface. This is ostensibly based upon an assumption that a split congestion rent allocation is appropriate because each EIM Entity BAA has transmission rights being made available to the EIM on either side of the interface. In the case of PacifiCorp's interface with the ISO at the Malin scheduling point, however, the current tariff rule is not precise enough in light of the known fact that, although there is congestion south of Malin in the ISO grid, PacifiCorp's EIM Transfers terminate at Malin, a scheduling point completely within PacifiCorp's west BAA (PACW). In this example, it is not appropriate to split congestion rents; instead, the tariff should recognize an allocation that recognizes the precise commercial and operational arrangements of each interface and allocate 100% of congestion

rents to the PACW. PacifiCorp has determined that this issue is material to PacifiCorp due to potential financial impacts. Accordingly, PacifiCorp strongly urges the ISO to take definitive action to resolve and correct this issue as soon as possible.

C. Modification of EIM Transfer Limit Constraints

PacifiCorp thanks the ISO for conducting the January 30, 2015, technical workshop on this proposal. While the workshop was helpful, the issue as presented requires a heightened degree of technical understanding of the EIM model, and as such, PacifiCorp urges the ISO to continue to carefully explain the nuances of the proposal to stakeholders. At a high level, PacifiCorp supports the ISO's effort to modify EIM Transfer limit constraints as more BAAs join the EIM due to the potentially unique nature of each EIM Transfer interface, and agrees that the EIM Transfer limits should be considered by intertie scheduling point. PacifiCorp understands that these modifications will enable the optimization software to ensure that EIM Transfers are constrained by the EIM Entity's energy transfer limits, which are set to reflect transmission rights released for the EIM, while also ensuring that the EIM Transfers are not constrained by scheduling limits on interties with the ISO or non-EIM BAAs. Additionally, the modifications are being designed to result in the most feasible and meaningful market solutions for EIM Transfers.

As explained by the ISO, in order for the optimization software to find the most direct path for EIM Transfers, the ISO proposes to add what it refers to as a "very small cost" to the equation. However, stakeholders conveyed concern during the January 30, 2015, workshop about the added cost and its potential impact on locational marginal prices ("LMPs") and revenue neutrality. The ISO responded that this nominal cost is not a tariff cost and does not get settled as a transmission charge; the cost represents an optimization parameter in order for the software to arrive at the most meaningful solution. Essentially, the adder helps the model determine which EIM Transfer interface to select in the optimization. While PacifiCorp understands the need for the model to be able to "weight" multiple EIM Transfer limit constraints for optimization purposes, PacifiCorp shares some of the concerns noted during this stakeholder process. PacifiCorp is similarly cautious about potential impacts to LMPs through this proposal and requests the ISO to address any alternatives that might achieve the same objective. PacifiCorp is also cautious about the establishment of anything that could possibly constitute a transmission "hurdle" equivalent prior to the ISO's Phase 2 EIM Year 1 Enhancements initiative for developing appropriate transmission charges.

The ISO further assured stakeholders that it would thoroughly review cost amount options to confirm that the proposed cost would be small enough that it would not materially impact the LMP (and the corresponding real-time congestion offset component) and large enough to allow the software to determine the most direct path and meaningful market solutions for EIM Transfers. PacifiCorp also heard the ISO indicate it would propose that EIM Entities would set this nominal cost. PacifiCorp requests clarification regarding whether the ISO will be proposing a specific cost amount or the EIM Entity will be responsible for setting the cost amount for its own BAAs. For example, will the ISO propose a cost range as a result of its review from which the EIM Entity will be required to set the cost? As an EIM Entity, PacifiCorp requests clear

guidance on this issue, preferably using methods reviewed and endorsed by the Department of Market Monitoring. PacifiCorp further requests that the ISO clarify exactly how the cost adder would be incorporated into the model and EIM systems to determine the impact on existing system configurations and integration. PacifiCorp also queries whether and how this proposal might work for an EIM Transfer interface that is jointly owned or operated (i.e., would *two* EIM interfaces need to be developed for one path interface to account for materially different EIM Transfer capability, commercial and operational considerations).

D. EIM Administrative Charge Redesign

The ISO has proposed to redesign the EIM Administrative Charge because the current design did not result in amounts that were anticipated and caused the ISO to over-collect from PacifiCorp. The ISO submitted a filing to the FERC that seeks to remedy the over-collection, which remains pending with the Commission. However, the ISO determined that it is necessary to redesign the EIM Administrative Charge to better align with the real-time charges assessed to ISO market participants as part of the ISO's grid management charge. PacifiCorp supports the ISO's proposal to include the EIM Administrative Charge in its quarterly review of the market services and system operations real-time rates. PacifiCorp understands that the percentages assessed to the EIM Administrative Charge for each category will remain the same for a period of three years pursuant to the ISO's grid management charge tariff provisions. PacifiCorp also supports the proposal to apply the market services and system operations rates separately in the EIM Administrative Charge calculation, which will represent more accurate rates than the current design of charging one combined rate. PacifiCorp recognizes that the ISO will extend the rates to four decimal points (instead of rounding to two decimal points) in order to accurately account for minor changes in the rates for the three year period during which the percentages applied to the EIM Administrative Charge will not change. Finally, PacifiCorp supports the ISO's proposal to eliminate assessment of the "minimum" EIM Administrative Charge, except that such minimum charge will be assessed only during the six month transition period following the EIM Entity's notice of termination. While PacifiCorp recognizes and acknowledges that the ultimate amount charged under this proposal will in large part be dictated by actual imbalance volumes, PacifiCorp emphasizes the importance of the quarterly review and adjustment process to ensure that PacifiCorp does not over-pay. Accordingly, PacifiCorp recommends that the ISO perform an analysis prior to the implementation of the redesign using actual historic EIM imbalance volumes to confirm that the redesign will not also result in market participants being charged amounts in excess of what is anticipated. If this analysis confirms a continued over-collection from market participants then PacifiCorp would recommend that the interim rate design stay in effect until the next ISO cost of service study is completed or a preemptive quarterly adjustment is put in place prior to the redesign going into effect.

E. Reduce Flexible Ramping Constraint Combinations

The ISO has proposed to reduce the number of allowable flexible ramping constraint combinations to ensure efficiency and accuracy as additional EIM Entities join the EIM. Currently, the ISO accounts for seven combinations for PACE, PACW, and the ISO BAAs (one for each BAA, one for PACE-PACW, one for PACW-ISO, one for PACE-ISO, and one for

PACE-PACW-ISO). As the EIM expands with new EIM Entities joining, the number of combinations will increase significantly, which the ISO believes will result in too many available combinations to effectively enforce the flexible ramping constraint and introduce unnecessary complexity to the market optimization. PacifiCorp recognizes the ISO's need to limit the flexible ramping constraint combinations and enforce one constraint in each EIM BAA and one system-wide constraint for the combination representing all EIM Entities and the ISO, beginning with the addition of NVE as a new EIM Entity. PacifiCorp requests that the ISO provide additional information about how this proposal could potentially relate to calculation of EIM benefits and if there is a connection between the reduction of possible flexible ramping constraint combinations and diversity benefits accruing in the EIM or value to PacifiCorp of offering resources used to resolve constraints in other EIM Entity BAAs.

F. Settlement of Non-Participating Resources

As previously stated in its comments submitted January 26, 2015, PacifiCorp supports the ISO's bid cost recovery ("BCR") proposal as it allows for consistent treatment for both ISO real-time self-schedules and EIM non-participating resource schedules. PacifiCorp understands that the ISO intends to address the issues causing assessment of BCR to ISO self-scheduled resources as well as EIM non-participating resources in a future stakeholder initiative.

G. Administrative Pricing Rules

PacifiCorp supports the ISO's proposal that if both FMM and RTD prices are not available in the EIM, the EIM Entity should provide the ISO with the administrative price and that it is reasonable that this could be based on an EIM Entity's pricing for settling imbalance prior to the implementation of the EIM (e.g., PacifiCorp's Hourly Pricing Proxy). PacifiCorp notes that such price mechanism/settlement may vary between transmission providers. PacifiCorp understands that the ISO will make a change in its tariff providing that when both FMM and RTD prices are not available in the EIM, for each EIM Entity, the ISO will use that EIM Entity's pricing for market suspension established in the EIM Entity's OATT.

H. GHG Flag and Cost Based Bid Adder

PacifiCorp supports development of a flag to allow participating resources to opt out of being considered for EIM Transfer into the ISO's BAA. PacifiCorp will not reiterate its December 8, 2014 and January 26, 2015 submitted comments here, although incorporates such comments by reference herein. PacifiCorp understands that the ISO proposes to limit the EIM GHG imports into the ISO's BAA to be no greater than the total MWs of the GHG bids from all EIM BAAs. PacifiCorp further understands from the ISO's presentation during the January 30, 2015 technical workshop that the ISO will consider long-term design changes in Phase 2 of the EIM Year 1 Enhancements initiative, if it is determined that EIM transfers are ultimately limited by the GHG bids.

I. Resource Sufficiency Evaluation of ISO and EIM Entities

As previously stated in its December 8, 2014 and January 26, 2015 comments, PacifiCorp reiterates that it agrees with the ISO's description of the application of the sufficiency test to the ISO balancing authority. PacifiCorp agrees with the ISO's proposal to provide transparency to discrepancies between tagged schedules, base schedules, and HASP schedules. PacifiCorp is not comfortable with the proposal to use prior-month tagging data to inform the resource sufficiency evaluation. Prior-month tagging data is not representative of the seasonal nature of transaction types and volumes in PacifiCorp's BAAs. Ideally, seasonal tagging data would be utilized for this purpose. In the absence of an established data set, PacifiCorp suggests that tagging data from a period much closer to real-time be used and refreshed on a rolling basis.

J. 15-Minute Bidding on Intertie Scheduling Points

In addition to its comments previously submitted, PacifiCorp agrees with the ISO's decision to move this item to Phase 2 of the EIM Year 1 Enhancements stakeholder process and looks forward to further discussions on this topic.

III.CONCLUSION

PacifiCorp appreciates the ISO's consideration of these supplemental comments and understands that the ISO plans to present its proposals to the ISO's Board of Governors for decision at its March, 2015 meeting.