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PacifiCorp Comments on the Consolidated EIM Initiatives Draft Final Proposal

PacifiCorp hereby submits the following comments to the California Independent System Operator Corporation (“ISO”) on its Consolidated Energy Imbalance Market (“EIM”) Initiatives draft final proposal dated September 5, 2017, (“Draft Final Proposal”). The Draft Final Proposal removes from scope the two EIM initiatives from the ISO’s 2017 stakeholder policy initiatives roadmap: management of bilateral schedule changes, and equitable sharing of wheeling benefits. The third-party transmission contribution proposal was removed from scope in the ISO’s Straw Proposal and PacifiCorp understands that this initiative will be moved to the ISO’s stakeholder initiatives catalog to be considered at a later date. The Draft Final Proposal now addresses only the new functionality proposals identified by the ISO as necessary to support the Powerex EIM implementation, which the ISO further states will also provide general benefits to the EIM and are largely applicable to all EIM Entities. PacifiCorp generally supports the ISO’s proposals in the Draft Final Proposal as further described below.

Management of Bilateral Schedule Changes

The ISO’s issue paper dated June 27, 2017, (“Issue Paper”) proposed to allow market participants the use of “wheel bids” to manage their exposure to imbalance settlement for bilateral schedule changes made after base schedules are submitted. In the Straw Proposal, the ISO removed its previous proposal and replaced it with a determination that in addition to moving the base schedule deadline closer to the e-Tagging deadline of T-20, the imbalance settlement concerns due to bilateral schedule changes after the T-57 deadline could be managed by an EIM Entity’s business practices or changes to an EIM Entity’s open access transmission tariff (“OATT”). In the Draft Final Proposal, the ISO removed the proposal from scope because stakeholder feedback indicated that it is unnecessary to move forward with this initiative.

PacifiCorp supports moving the base schedule deadline closer to the e-Tagging deadline of T-20 and agrees that doing so will partially address the issue and any remaining settlement concerns could be managed by the EIM Entity at its discretion. PacifiCorp supports removal of this proposal from the scope of this initiative. PacifiCorp further acknowledges that the EIM Entity retains discretion to determine if and how it will settle imbalances due to bilateral schedule changes submitted past the market scheduling deadline, including to maintain the status quo for such settlements.



Equitable Sharing of Wheeling Benefits

The issue identified by the ISO is that some EIM Entities experience more net wheeling than others relative to EIM transfers that sink or source within an EIM balancing authority area (“BAA”). The Issue Paper suggested that existing ISO functionality could be used to “reallocate” congestion revenues in the real-time congestion offset (“RTCO”) to the wheel-through EIM Entity facilitating the transfer when congestion occurs. However, the ISO moved away from this suggested solution in its Straw Proposal, and instead proposed using one of two recommended solutions: 1) an ex-post payment based on the amount of net wheeling that occurs; or 2) a hurdle rate that can be incorporated into the market and allow market competition while providing compensation to EIM BAAs for net wheeling.

In its Draft Final Proposal, the ISO removed this initiative from scope, acknowledging that stakeholders generally opposed implementation of both proposed solutions. The ISO removed this initiative from scope because stakeholders recognized that based on the ISO’s net wheeling study, all of the EIM Entities currently have more EIM Transfers in and out of their BAAs than wheel-throughs. Therefore, all EIM Entities currently benefit from EIM Transfers more than they are facilitating wheels. The ISO has committed to monitor the net wheeling as the EIM footprint expands, and has further committed to include net wheeling data in its quarterly EIM benefits reports going forward. PacifiCorp supports removal of this initiative from scope, inclusion of the initiative in the stakeholder initiatives catalog to be considered later, and the ISO’s commitment to monitor and report the data.

New EIM Functionality

In the Straw Proposal, the ISO introduced five new functionality proposals: 1) automated matching of import/export schedule changes with a single EIM non-participating resource; 2) automated mirror system resources at ISO intertie scheduling points; 3) ISO to provide EIM Entities with base EIM transfer system resource (“ETSR”) imbalance settlement information; 4) leveraging non-generator resource (“NGR”) modeling functionality for EIM participating resources (“EPRs”) and non-participating resources (“NPRs”), aggregated and non-aggregated; and 5) allow submission of base generation distribution factors (“GDFs”) for aggregated NPRs. The Straw Proposal stated that the proposed new functionality will be necessary to support Powerex’s EIM implementation, but that the functionality will “also provide general benefits to the EIM and are largely applicable to all EIM entities.”

PacifiCorp appreciates the ISO’s and Powerex’s recent stakeholder outreach and planned stakeholder engagement to further clarify the proposed new functionality and how it will be used by Powerex to facilitate its EIM implementation. As stated in its previous comments, PacifiCorp supports the ISO’s efforts to onboard a new participant to the EIM that requires some modifications to the standard form of entry, but in doing so, other EIM participants need to be assured that any such modifications are transparent and do not unduly prefer or discriminate against other market participants. PacifiCorp notes that while what stakeholders heard from the ISO and Powerex in recent stakeholder communications seems reasonable, the design is not yet



complete. The ISO has conveyed how the new functionality should work, but has not yet provided essential design details. PacifiCorp recommends and requests that the ISO thoroughly document how it anticipates the new functionality will be designed, as the ISO verbally conveyed during recent stakeholder engagements. PacifiCorp further requests that the documented design details be updated and published on a regular basis in order to further inform and educate stakeholders on how the new functionality will work.

Auto-Matching of Import/Export Schedule Changes with NPR

The ISO explained in the Straw Proposal that this functionality allows an EIM Entity to automatically adjust a single EIM NPR schedule to match import or export schedule changes after T-40. The ISO further explains in the Draft Final Proposal that currently the BAA operators, at their discretion, have two options to address import or export schedule changes that occur after to T-40: 1) manually dispatch a generator internal to the EIM BAA to resolve the imbalance; or 2) allow the market to resolve the imbalance by using the available bid stack. PacifiCorp understands that the new auto-matching functionality provides for a third option, which is to allow an NPR's schedule to automatically adjust when an intertie schedule change occurs after T-40. This option would eliminate the need to use a manual dispatch, which takes more time to get into the market.

In the Draft Final Proposal, the ISO has proposed to implement this auto-matching functionality in two phases. The first phase, which is scheduled to be implemented winter 2017, would enable EIM Entities to use the auto-matching functionality by designating only one NPR to auto-match the import/export changes. Phase two of the implementation, targeting a fall 2018 release, would allow for multiple NPR and intertie schedule change pairs.

After further detailed explanation by the ISO and Powerex on how this auto-matching functionality is intended to work, PacifiCorp supports the intent of the proposal, which is to expedite the delivery of accurate information to the market regarding how NPRs will be dispatched, but notes that it would not be practical for PacifiCorp to use until phase two is implemented, due to having third-party customers with load, NPRs and EPRs within its BAAs. However, PacifiCorp has concerns that this feature could promote a larger scale of NPR base schedule changes in the post T-40 timeframe than is currently experienced in the EIM footprint, which could have unintentional impacts on the other EIM participants. As an example, Powerex and Bonneville Power Administration ("BPA") discussed that they can, and do have schedule changes of 1,000 MW or more after the T-40 timeframe. If changes of this scale result in dispatch of NPRs off of base schedules, these changes presumably would be included in the Incremental EIM Flow¹ as calculated by the ISO on the BPA transmission system. Because the amount of participating capacity that Powerex is providing to the market could be less than 30% of that magnitude, theoretically the burden of offsetting 70% or more of the impact of that bilateral economic transaction will fall upon the EPRs in other EIM BAAs. In that case, a transaction that occurs today (prior to Powerex joining the EIM) and that is coordinated by BPA, and that likely has no net effect on certain BPA flowgates, could result in a large calculated

¹ See the Coordinated Transmission Agreement ("CTA") between the ISO and BPA.



Incremental EIM Flow impact on the same flowgates, and lead to unnecessary counter-flow mitigation being deployed on existing EPRs. PacifiCorp understands that this is not an intended consequence of this feature, but is concerned that this and other impacts could be realized depending on how the ISO designs the actual implementation. For this reason, PacifiCorp requests that the ISO ensure that the design of these new tools be an open process that elicits technical feedback to ensure that this and other unintentional impacts are avoided.

Automated Mirror System Resources at ISO Intertie Scheduling Points

This proposed enhancement would automate the mirroring of ISO import/export schedule changes at ISO scheduling points after T-40, and the functionality is limited to mirroring ISO import/export schedules from registered system resources. The ISO explains further that the auto-mirroring functionality could be combined with the auto-matching functionality by specifying an automated mirror system resource to be auto-matched by the single NPR used for that purpose, but that the automated mirror system resource must only be mirroring ISO import/export self-schedules. As stated above, PacifiCorp generally supports this proposal, but notes that it would not be practical for PacifiCorp to use until phase two of the auto-matching implementation due to the presence of third-party customers with load, NPRs, and EPRs in PacifiCorp's BAAs.

Base EIM Transfer System Resource Imbalance Settlement

This enhancement is proposed provide EIM Entities with settlement information for Base ETSR schedule changes. The data would allow EIM Entities to determine the point of delivery of the Base ETSR and therefore the LMP used for settlement between the two EIM Entities would be known. The ISO states that it will not require EIM Entities to use this data but it may help facilitate settlement of bilateral transactions in the EIM area. As stated in its comments on the Straw Proposal, PacifiCorp recommends that the ISO settle the base ETSR schedule changes with EIM Entities if the ISO has the available information. This would resolve the current non-comparable ISO imbalance energy settlement treatment between base schedule changes at ETSR points and base schedule changes at static intertie points. The ISO has the necessary systems to accurately settle the ETSR base schedule changes and its position as the market operator will better ensure any implementation of ETSR base schedule change settlements will be handled consistently across all EIM Entity BAAs and thus benefit all EIM Entity transmission customers.

Leveraging New NGR Modeling Functionality

The ISO explains in the Draft Final Proposal that this new functionality will be available to all scheduling coordinators and enables the modeling of individual or aggregated EPRs and NPRs. With this enhancement, the aggregated resource can have a base schedule equal to zero and still be able to receive a dispatch instruction to reduce output. The ISO further explains that these resources will be subject to local market power mitigation (LMPM) and can use any of the methods under the ISO's tariff to establish a default energy bid. In addition, the ISO states in the Draft Final Proposal that the existing dynamic competitive path assessment (DCPA) and LMPM methodologies will apply to the generic NGR model considering it in algebraic injection, and the



energy bid of the modeled generic NGR will be subject to mitigation above the competitive LMP at its location. PacifiCorp does not oppose this proposal, but urges the ISO to work with stakeholders to further enhance the generic NGR model to make it more usable for other participants.

Allow Submission of Base GDFs for Aggregated EIM NPRs

This enhancement is proposed to support base GDF submission for aggregate NPRs through the submission of base schedules, which will be used to calculate the aggregate LMP for the aggregate NPR. The ISO explains that the implementation of this enhancement is critical to accurate modeling on an hourly basis and will enable the market to continue running efficiently and economically. PacifiCorp generally supports this proposal.

Conclusion

PacifiCorp appreciates the opportunity to submit these comments and looks forward to continuing to work with the ISO and stakeholders on the design and implementation of the new EIM functionality proposals.