



**PACIFICORP'S COMMENTS ON THE
STEPPED CONSTRAINT PARAMETERS
ISSUE PAPER
May 26, 2016**

I. INTRODUCTION

PacifiCorp hereby submits the following comments to the California Independent System Operator Corporation ("ISO") on the Stepped Constraint Parameters issue paper that was issued May 5, 2016 ("Issue Paper"). PacifiCorp appreciates the opportunity to provide comments on this initiative for the ISO's consideration.

II. COMMENTS

The ISO has published an Issue Paper and initiated a stakeholder process to consider the appropriate configurations for market scheduling and pricing parameters that are associated with optimization constraints and govern conditions that may set market prices and relax constraints. PacifiCorp's comments on the Issue Paper are as follows.

A. Transmission Constraint Relaxation Parameter

The ISO is considering a tiered approach for relaxing the transmission constraints based on the magnitude of the violation and the voltage level. For transmission that is 230kV and above, the ISO proposes a first tier of a \$750 scheduling parameter for below 2% in exceeding the original limit, and a second tier of a \$1,500 scheduling parameter (which is the current parameter) for 2% or more in exceeding the original limit. Further, for transmission that is 115kV and lower, the ISO proposes a first tier of a \$500 scheduling parameter for below 2% in exceeding the original limit, and a second tier of a \$1,000 scheduling parameter for 2% or more in exceeding the original limit. The ISO states that the tiered approach avoids using large, ineffective re-dispatch for small amounts of congestion flow relief without material degradation to system reliability.

The ISO points out that the relaxation parameter can be a viable mechanism for efficient dispatch, but that this is a balance that must be maintained so that the relaxation of the transmission constraint does not cause issues with system reliability. PacifiCorp would like additional information on how the ISO's proposal will manage system reliability.

B. Shift Factor Effectiveness Threshold

In the Issue Paper, the ISO explains that a shift factor effectiveness threshold exists in order to ensure that the market optimization can solve within market timelines and determine whether a bid is effective for managing congestion on a binding transmission constraint. Currently, the market software excludes shift factors with an effectiveness of less than 2%. The ISO believes that reducing the threshold from 2% to 0.1% would be appropriate and can be achieved within the current market timelines.

In order to provide comments on the shift factor effectiveness threshold, PacifiCorp would like to better understand the analysis done by the ISO presented in Table 1 of the Issue Paper.

C. Power Balance Constraint

The ISO is seeking stakeholder input on the appropriateness of implementing a tiered approach, using predetermined tiered MW quantities and prices, to address small infeasibilities of the power balance constraint, which would complement the available balancing capacity mechanism implemented last March.

In order to provide meaningful feedback on the appropriateness of implementing this proposal in the EIM, PacifiCorp would need to better understand the details of the ISO's proposal. It is unclear how the ISO would operate a tiered approach in the EIM. The examples provided by the ISO, associated with the small power balance constraint infeasibilities, seemed to be related to markets that are Day 2 markets versus an EIM construct wherein it is expected that each entity will have sufficient capacity to meet its reliability requirements. In addition, the presentation that was cited in the proposal seems to refer to utilizing spinning reserves as the capacity that would be utilized to facilitate the power balance constraint tiered approach. It is unclear to PacifiCorp how the utilization of reserves would be accomplished by the ISO, while still respecting the balancing authority responsibilities of the EIM entity.

D. EIM Transfer Limit When Resource Sufficiency Evaluation is Failed

The ISO performs a resource sufficiency evaluation on an hourly basis for each balancing authority in the EIM area, comprised of three tests – base schedule balance, bid capacity, and flexible ramping sufficiency. In the event a balancing authority fails the evaluation, incremental EIM transfers into and out of that balancing authority area (“BAA”) are restricted, or frozen, to the last fifteen-minute market (“FMM”) schedule from the previous operating hour, impacting the locational marginal prices (“LMP”) in that BAA. In addition, the ISO explains that under- and over-scheduling penalties are allocated when imbalance exceeds certain thresholds, however,

these penalties do not impact LMPs within the BAA, but result in uplift revenues that are allocated to other BAAs in the EIM that pass the resource sufficiency evaluation over the trade day. In its Issue Paper, the ISO suggests that a stepped penalty pricing approach, similar to over- and under-scheduling penalties, may be more suitable than freezing EIM transfers into and out of the offending BAA.

While PacifiCorp agrees with the ISO that EIM transfer capability is essential for realizing EIM benefits and maintaining intra-hour flexibility, imposing a penalty structure in order to “maximize” those benefits may impose consequences on the BAA that need to be further understood. While PacifiCorp would not be opposed to supporting a BAA that was resource insufficient if it had available capacity, there needs to be additional clarity from the ISO on its proposal.

PacifiCorp would like the ISO to provide additional detail on how the penalty would be imposed on the entity that fails the resource sufficiency evaluation. PacifiCorp currently operates in a manner that is resource sufficient, however, due to limitations in the market model, PacifiCorp's full range of balancing tools are not always accurately reflected. In the situation where PacifiCorp's resource sufficiency is inaccurately reflected in these hourly evaluations, PacifiCorp is concerned about additional penalty pricing for imports or exports. In addition, it is unclear if the penalty pricing would be imposed across the entire hour, even if the BAA were to become resource sufficient during the hour.

E. Lowering Bid Floor

In the Issue Paper, the ISO seeks stakeholder input on an appropriate level of the bid floor and whether or not there is a need to make the bid floor and bid cap more symmetrical. The current bid floor is -\$150 and the bid cap is \$1,000.

PacifiCorp would like further clarification on what the ISO believes may be available in the market that is currently not covered by the -\$150 pricing floor currently in place. In the real-time market, with the \$1,000 MWh penalty pricing, there is the incentive to schedule enough capacity to meet expected demand. However, it is easier to schedule capacity to be available to be dispatched than to schedule capacity to be available to be decremented. Again, PacifiCorp would like to get further clarification from the ISO on the types of resources it expects to receive at pricing that is below -\$150.

III. CONCLUSION

PacifiCorp appreciates the ISO's consideration of these comments.