

**PUGET SOUND ENERGY SUPPLEMENTAL COMMENTS  
WORKSHOP ON LOCAL MARKET POWER MITIGATION (OCTOBER 10, 2018)  
OCTOBER 17, 2018**

Puget Sound Energy (PSE) appreciates the opportunity to provide the following comments on the workshop on local market power mitigation (LMPM) held by the CAISO on October 10, 2018.

**COMMENTS**

1. During the workshop, CAISO reviewed the outcomes of two potential options to address the “economic displacement” issue described in Section 5.1.2 of the LMPM Issue Paper and Straw Proposal. These options included limiting transfers between balancing area authorities (BAAs) within an import constrained bubble to either the pre-mitigation transfer level, or the maximum of either the pre- mitigation transfer level or the flexible ramp up (FRU) requirement less the export imbalance.

Presuming that stakeholders’ concerns about default energy bids (DEBs) as described in Section 5.2 of the LMPM Issue Paper and Straw Proposal are satisfactorily addressed through this stakeholder process, PSE believes that it would be helpful for CAISO to perform additional analysis to illustrate the need to address the economic displacement issue. Limiting transfers to any level lower than the voluntary amount of the Energy Transfer System Resource (ETSR) between BAAs seems unnecessary when resources are already mitigated to a level that reflects their actual cost. Imposing artificial congestion by limiting ETSRs in this circumstance seems unnecessary, and may decrease the overall efficiency of the market. PSE illustrates the inefficiency of these solutions in the appendix to these comments.

2. Several stakeholders have suggested that the new DEB option proposed in Section 5.2 of the LMPM Issue Paper and Straw Proposal reflect that sellers may have the ability to sell at multiple locations. PSE agrees in principle that DEBs should reflect a seller’s opportunity costs, which may include foregone sales at locations where a seller may have been able to sell power. However, important details on the proposal are lacking. For example, what criteria would be used to determine whether an entity has the ability to sell at a particular geographic location? How will CAISO determine the depth of each market location, and how will that depth impact the calculation of an entity’s opportunity costs at that location? If an EIM entity has the ability to schedule transmission rights

close to operation, how will this impact the DEB calculation? Should CAISO move forward with this proposal, PSE requests that CAISO provide additional details about how it would be implemented, and analysis on the resulting market impacts.

## APPENDIX

Example D<sup>1</sup> (also included as Figure 1 below for the reader’s convenience) from the presentation CAISO used during the workshop can be used to illustrate the inefficient outcomes associated with the current proposals to address the economic displacement issue.

Since the only generators that move across the Current MPM Run (illustration 1 of 3 in Figure 1, “Illustration 1”), Current Market Run (illustration 2 of 3 in Figure 1, “Illustration 2”), and Proposed Market Run (illustration 3 of 3 in Figure 1 “Illustration 3”) are Gen A and Gen F, for the purpose of delta cost comparison across three cases we can ignore the rest of the system cost. Table 1 shows the cost calculation by using DEBs and Table 2 shows the cost calculation by using the bid cost for the Current MPM Run (Illustration 1) and Current Market Run (Illustration 2) and mitigated bid cost for the Proposed Market Run (Illustration 3). The analysis shows that running the system with the Proposed Market Run (Illustration 3) is more expensive than the Current Market Run (Illustration 2) by  $\$17,500 - \$15,000 = \$2,500$  in Table 1, and  $\$21,700 - \$21,300 = \$400$  in Table 2. **In both calculations, the proposed market run design is inefficient compared to the current market run design. Artificially reducing the ETSR limit unnecessarily causes congestion of \$4/MWh in the mitigated bubble.**

**Table 1. Total Default Energy Bid Cost**

Example D	Gen A	Gen F	Total Cost
(1 of 3) Current MPM Run	50 \$/MW * 100 MW = \$ 5000	75 \$/MW * 200 MW = \$ 15000	\$20,000
(2 of 3) Current Market Run	50 \$/MW * 300 MW = \$ 15000	75 \$/MW * 0 MW = \$ 0	\$15,000
(3 of 3) Proposed Market Run	50 \$/MW * 200 MW = \$ 10000	75 \$/MW * 100 MW = \$ 7500	\$17,500

**Table 2. Total Bid Cost/Mitigated Bid Cost**

Example D	Gen A	Gen F	Total Cost
(1 of 3) Current MPM Run	80 \$/MW * 100 MW = \$ 8000	75 \$/MW * 200 MW = \$ 15000	\$23,000

<sup>1</sup> [http://www.caiso.com/Documents/Presentation-LocalMarketPowerMitigationEnhancements-WorkingGroup-Oct10\\_2018.pdf](http://www.caiso.com/Documents/Presentation-LocalMarketPowerMitigationEnhancements-WorkingGroup-Oct10_2018.pdf)

<b>(2 of 3) Current Market Run</b>	71 \$/MW * 300 MW = \$ 21300	75 \$/MW * 0 MW = \$ 0	\$21,300
<b>(3 of 3) Proposed Market Run</b>	71 \$/MW * 200 MW = \$ 14200	75 \$/MW * 100 MW = \$ 7500	\$21,700

Figure 1: Example D – Economic displacement – Proposed modification following MSC meeting

