PUGET SOUND ENERGY COMMENTS DAY-AHEAD MARKET ENHANCEMENTS MARCH 21, 2018

Puget Sound Energy (PSE) appreciates the opportunity to provide the following questions and considerations on the California Independent System Operator's (CAISO) Day Ahead Market Enhancements Issue Paper/Straw Proposal. PSE is supportive of CAISO's goals to improve grid reliability and the efficiency of the day-ahead market (DAM), and looks forward to CAISO addressing the following questions and considerations in the next iteration of the proposal.

A. QUESTIONS/CONSIDERATIONS

- On the stakeholder call, CAISO seemed to indicate that the imbalance reserve requirement for an
 external BAA will be established similar to Flexible Ramp requirement. PSE believes that the current
 approach utilized to establish the Flexible Ramp requirement is flawed because historical
 information does not accurately predict real-time market potential for volatility in many operational
 instances.
- 2. Please clarify which resource classes will qualify for the imbalance reserve product and how this product will work in conjunction with the AS market.
- 3. On the stakeholder call, CAISO seemed to indicate that participating resources that receive an imbalance reserve product award in DAM would not be able to adjust their bids in real-time. Please provide additional information about CAISO's reasoning for this policy.
- 4. PSE understands that hydro resources with ponding ability can bid into EDAM using either (a) a traditional generator model (i.e. three-part bids), or (b) a Use-Limited Resource (ULR) model (i.e. state of charge at the beginning and end of the day, limited energy for the day among other bid parameters). Does CAISO allow for the ULR model to provide imbalance reserves?
- 5. Is the financial margin that a resource makes in DAM still guaranteed if it is decremented from its DAM schedule due to downward imbalance reserve deployment?