



Stakeholder Comments Template

Variable Operations and Maintenance Cost Review Working Group – Storage Resources

This template has been created for submission of stakeholder comments on the VOM Cost Review working group for storage resources that was held on July 17, 2019. The workshop, stakeholder meeting presentations, and other information related to this initiative may be found on the initiative webpage at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/VariableOperations-MaintenanceCostReview.aspx>.

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **July 30, 2019**.

Note: Upon submission, please indicate if you would like your comments to be confidential.

Submitted by	Organization	Date Submitted
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The ISO has permission to post these comments publicly (please reply yes or no):

Please provide your organization's comments on the following topics and questions.

1. Please provide any comments or updates you may have to the definitions of Major Maintenance Costs, Variable Operations Costs, and General and Administrative Costs, if any, listed in the July 2, 2019 report found on the stakeholder initiative website. Please comment in particular as to how these definitions relate (or do not relate) to non-generating resources (NGRs). Note that other considerations related to how NGRs' costs will be modeled in our markets (e.g. via a default energy bid) should be discussed as part of the Energy Storage and Distributed Energy Resources (ESDER) stakeholder process.

Consistent with comments raised by stakeholders in the Storage Resources Work Group Session, PGE encourages the CAISO to develop a default VOM cost adder that can be used to establish a floor-price for dispatch costs for NGR resources in instances where the variable fuel cost is zero. As noted on the call, VOM adders and MMAs will likely vary by technology type. If CAISO intends to establish a DEB framework that will express these costs as part of the broader ESDER Phase 4 initiative, setting a reasonable placeholder value for NGRs that CAISO staff will commit to updating once the ESDER Phase 4 Initiative is complete (and ahead of their next three-year review cycle) is superior to the assumption that there are no VOM costs for NGRs.

2. Please offer your feedback on structure of this stakeholder initiative and working groups.

PGE appreciates the opportunity to provide comments on the ISO's efforts to review the VOM cost adders and recognizes the challenges associated with identifying those maintenance activities that are directly linked to variable costs.

Additional comments

Please offer any other feedback your organization would like to provide on the topics discussed during the working group.