

Stakeholder Comments Template

Energy Storage and Distributed Energy Resources (“ESDER”) Stakeholder Initiative

Submitted by	Company	Date Submitted
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The 12/23/15 ESDER Revised Draft Final Proposal may be found at:

<http://www.caiso.com/Documents/RevisedDraftFinalProposal-EnergyStorageDistributedEnergyResources.pdf>

The presentation materials discussed during the 01/07/16 stakeholder web conference may be found at:

CAISO Revised Agenda and Presentation:

http://www.caiso.com/Documents/Agenda_Presentation-EnergyStorageDistributedEnergyResources010616.pdf

SCE Proposed Modification to the MGO proposal:

<http://www.caiso.com/Documents/SCEProposedModificationtoMeterConfigurationB2.pdf>

Proposal	Overall Level of Support (Fully Support; Support With Qualification; or, Oppose)	Comments (Explain position)
<p>Allow an NGR resource to provide its initial state of charge (SOC) as a bid parameter in the day-ahead market.</p>	Fully Supports	<p>PG&E supports allowing market participants to set an initial state of charge (SOC) for the day-ahead market.</p>
	Proposed Enhancement	<p>PG&E recommends CAISO consider the following two state of charge enhancements to prevent market inefficiencies:</p> <ol style="list-style-type: none"> 1. CAISO has stated there would not be any restrictions on the value of the initial SOC, or on any requirements to actually be at (or close to) that SOC. CAISO should consider instituting monitoring requirements to assess if there are market inefficiencies as a result of resources not bidding their initial SOC at or near the resource’s actual SOC. 2. Throughout the ESDER initiative, PG&E has requested that the CAISO provide the mathematical formulation for how the state of charge (SOC) of a resource is optimized. All stakeholders should be able to test and validate that CAISO’s interpretation of the resources’ SOC used in the market is accurate. <p>At minimum, PG&E requests that in all three markets (DA, FMM and RT), the CAISO provide the calculations for how the SOC is determined and estimates of the SOC in CAISO’s Market Results Interface (CMRI) that were used in each of these markets for each hour or market interval. Providing the SOC estimate in CMRI would allow market participants to confirm that the CAISO is interpreting and modeling the SOC correctly. This also mirrors similar information provided in CMRI today – attributes of the market that affect the results – such as transmission constraints. If not in CMRI, CAISO could provide hour-by-hour results against the modeling, similarly to how Pay for Performance has been exposed. If using the latter case, results should be available to any NGR resource (not NGR-REM, due to the resource being managed by the CAISO under this scenario).</p>
<p>Allow an NGR resource the option to not provide energy limits or have the ISO co-optimize an NGR</p>	Fully Supports	<p>PG&E is appreciative of the work the CAISO has done to allow an initial SOC value as a daily bid parameter and to provide the flexibility for a resource to self-manage its SOC and supports this enhancement.</p>

<p>based on the SOC.</p>	<p>Proposed Enhancement</p>	<p>In ESDER Phase 2 (2016 enhancements) PG&E strongly suggests that CAISO address throughput limitations as a parameter in the NGR model. Some of PG&E’s storage resources will have throughput limitations (e.g., a maximum annual discharge limitation)—a parameter the current NGR model cannot accommodate. Managing throughput limitations is critical in order to honor resource warranties and to maximize the useful life of these resources</p>	
<p>Allow a PDR/RDRR resource the option of a performance evaluation methodology based on Metering Generator Output (“MGO”) concepts.</p>	<p>As proposed.</p>	<p>Oppose, pending resolution of open issues</p>	<p>PG&E’s previously expressed concerns around “overlapping/double” compensation remain for Multiple-Use Applications (MUA) where a resource potentially provides both wholesale and retail benefits. There are numerous issues associated with sub-metering, subtractive billing, rates, and meter ownership that need to be addressed in coordination with the CPUC, as these issues have a CPUC nexus and most would require funding to address (potentially through a General Rate Case). These issues go beyond the use of statistical sampling (discussed below). The Track 2 Scoping Memo recently issued in the CPUC’s Energy Storage Rulemaking acknowledges some of these critical issues that require attention. PG&E looks forward to working with both the CAISO and the CPUC along with other parties to advance these critical issues.</p>
	<p>With modification proposed by SCE.</p>	<p>Oppose, pending resolution of open issues</p>	<p>PG&E views SCE’s proposal as providing additional guidelines when there is insufficient information. Using the Net Benefit Test price threshold as a determinant appears reasonable. Notwithstanding the merit of the proposal, PG&E expresses its concern about the procedural due process of addressing new proposals that are not formally released, in advance, through the Stakeholder forum.</p>
<p>Proposal to support use of statistical sampling</p>	<p>Fully Support</p>	<p>PG&E appreciates the CAISO’s expansion of the ability to utilize statistical sampling when Revenue Quality Meter Data (RQMD) is not derived using hourly interval meter data for settlement purposes.</p>	