

Stakeholder Comments Template

| Submitted by | Company | Date Submitted |
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Tesla appreciates the opportunity to submit comments on the Draft Final Proposal addressing Phase 2 issues in the CAISO’s Energy Storage and Distributed Energy Resources stakeholder initiative. In this filing we limit our comments to addressing the proposed language related to station power, as well as the development of a load consumption product or service as an enhancement to Demand Response (DR). Tesla also touches on the need to address ongoing barriers that prevent behind the meter storage assets from exporting to the grid and receiving compensation for doing so. While we recognize this issue is not within scope of Phase 2 of the ESDER initiative, we encourage the CAISO to include this issue in Phase 3.

1. Distinguishing between Charging Energy and Station Power

Comments:

In the Draft Final Proposal, CAISO proposes to modify the language regarding station power in its metering tariffs to ensure that it does not inadvertently create a conflict or inconsistency between its requirements and the requirement of the CPUC or other local regulatory authority. Tesla strongly supports the simplified approach that CAISO has taken in the Draft Final Proposal, which essentially defers what constitutes station power to the local authority rather than attempting to specifically determine and harmonize what storage system functions or systems constitute station vs. non-station power. We

believe this approach is reasonable and can avoid conflicting requirements down the road.

2. Increase Load Consumption as Demand Response Enhancement

Comments:

As Tesla has previously opined, we strongly support enhancements to the proxy demand resource (PDR) product including augmenting the product to include load consumption. Recognizing that oversupply of generation has already resulted in periods of low or negative pricing in the middle of the day, there is a clear and urgent need to develop this enhancement to PDR to improve market efficiency through a bi-directional product.

In considering this, CAISO staff has indicated that owing to the retail billing implications of customer participation in a hypothetical load consumption product, such a product is too fraught to consider developing and implementing until such implications are addressed. Tesla strongly disagrees with this perspective. Provided that customers understand that their retail bills will be impacted by a decision to charge based on the billing determinants they are subject to pursuant to their retail tariff, Tesla submits that they can effectively manage these issues and determine for themselves whether to provide load consumption and to what degree it makes sense, given their circumstances, the retail rates they face, and wholesale pricing. For many customers, opportunities to offset their retail bill by capturing negative pricing in the wholesale market would be of significant value while simultaneously helping the state mitigate over-generation issues. In short, Tesla does not agree that CAISO must wait for retail rate design issues to be resolved in order to create a bi-directional PDR product.

Tesla also has some concerns regarding the perspective offered at the June 13, 2017 workshop during which CAISO staff appears to defer to stakeholders to revive and manage the Load Consumption Working Group (LCWG). While Tesla would very much support re-engaging in a working group process, it is important that CAISO play a central role in organizing and facilitating any such effort. The development of agendas, convening of meetings, tracking of issues and meeting facilitation is absolutely essential for such efforts to bear fruit. To that end, we encourage the CAISO to support the work of the LCWG, albeit with the understanding that stakeholders need to take an active role in this effort to ensure meaningful progress is made.

3. ESDER Phase 3

Comments:

In the Draft Final Report, CAISO identifies the following issues as things they plan on addressing in Phase 3 of this initiative:

- The development, if feasible, of a load consumption product for DR resources and participation in the regulation market;
- Defined rules for storage modeled as non-generator resource (NGR) to qualify as a use-limited resource;
- Reflecting costs and modeling of physical limitations of storage as NGR; and
- Any issues identified in the Track 2 of the CPUC's energy storage proceeding (CPUC Rulemaking 15-03-011) on multi-use application (MUA).

Tesla supports continued discussion and progress on each of these items. In addition, we encourage the CAISO to include the issue of enabling behind-the-meter storage resources to export and receive compensation for doing so in the wholesale market via modifications and refinements to the PDR product. Currently, the existing pathways for exporting from behind-the-meter storage systems are impractical for a variety of reasons. For example, exporting from behind-the-meter energy storage would require participation as NGR, which as Tesla has pointed out previously will require 24x7 market settlement which is an uncontrolled risk for market participation. Because this barrier remains effectively unaddressed, substantial value is being left on the table to the degree existing rules inhibit the full utilization of behind the meter storage resources. This untapped value will only increase as behind the meter storage systems continue to proliferate.