Stakeholder Comments Template

David Submitted by	Company	Date Submitted
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The CAISO held a stakeholder workshop to find consensus on the issues and identify additional topics for ESDER 3. The presentation and all supporting documents can be found on the ESDER3 webpage. Additionally, the CAISO is considering a December 7, 2017 workshop, if needed. Please save the date and look out for all relevant market notices.

<u>Important:</u> As mentioned at the November 6, 2017 workshop, the CAISO requests that stakeholders take into consideration their top priority for ESDER 3 when writing in support for a <u>topic.</u>

1. Demand Response

The CAISO requests stakeholders' rank and provide their justification for the following topics:

- 1. **Recognition of a behind the meter resource in load curtailment** ** Extend the meter generator output (MGO) model to EVSEs and evaluate it applicability to other devices.
- 2. **Removing the single LSE requirement/ DLA discussion** Remove the requirement of a single LSE for DR and modify use of default load adjustment (DLA)
- **3.** Load shift product Develop a load shift capability for behind the meter storage. (Currently an ESDER3 priority)
- **4. Load shift product** Evaluate all applicable load for extension of the use of a load shift product.
 - **1.a. Single PDR constraint for MGO locations. Propose working group to coordinate with DRRS system administrators to consider options for MGO and virtual meter locations to participate in separate PDRs.

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Comments:

1. The Joint EV Charing Parties strongly support inclusion of "Recognition of a BTM resource in load curtailment" in scope for ESDER 3. The consensus during the November 6th workshop was that this was a compelling topic for ESDER 3, but potentially with a broader scope including consuming DERs generically. While the Joint EV Charging Parties are not fundamentally opposed to a broader scope, the issue needs to be scoped as to neither increase the effort or time to develop a final proposal to the Board, nor result in a subsequent process and duration to finalize the details of CAISO participation by submetered Electric Vehicle Charging Equipment (EVSE) under PDR. The scope of the issue could be controlled by focusing on those BTM sources of consumption that possess both revenue quality interval and instant power metering capabilities, which is embedded in the consuming device. If CAISO Staff does not believe a broader scope of the issue cannot be supported to do time and resource constraints, the Joint EV Charging Parties would reiterate its comments from October 18, 2017, regarding transportation electrification and vehicle-to-grid integration as being a "priority of the state," especially given that the transportation sector comprises the largest of statewide GHG emissions. A focus on EVSE load curtailment could be used as a template and accelerant for future PDR enhancements regarding submetered DERs, much like MGO will have served as a model for this issue.

- 1.a. Stem proposed that the CAISO could also review the prohibition of an MGO resource at a location to participate in a separate PDR from the virtual metered load at that same location. The Joint EV Charging Parties agree that this is a critical enhancement for PDR participation. In order to focus ESDER 3 on the market participation aspects, CAISO Staff should recommend a separate working group, potentially outside of ESDER 3, to be established for interested parties and CAISO Demand Response Registration System administrators to consider viable options for supporting two "locations" in the DRRS at the same service account number.
- 2. The Joint EV Charging Parties support the inclusion of "Removing the single LSE requirement/ DLA discussion." As EV adoption ramps up, meeting the minimum scale requirements across multiple LSEs will leave some EVSE orphaned.
- 3. The Joint EV Charging Parties support the inclusion "Load shift product" with a focus on MGO, so long as EV charging is recognized equivalently as "storage on wheels" and

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¹ Joint EV Charging Parties, CESA and OhmConnect supported focus on EVSEs; PG&E, SCE, CPower, and Olivine were supportive, especially if broadened to DERs generically.

² The requirement for embedded metering would address SCE's concerns about shifting of load between a submeter and facility meter.

utilizing a submetered measurement methodology, if one is ultimately approved by the Board. Such an addendum should not require additional effort in the stakeholder process for Load Shift product development.

4. If the CAISO Staff foresees complications to the proposed addendum in #3 above because the ultimate approach to a Load Shift product narrowly focused on MGO resources may not be applicable to submetered unidirectional EVSE resources, then the Joint EV Charging Parties would support broadening the issue to "evaluate all applicable load for extension of the use of a load shift product."

2. Multiple-Use Applications

The Joint EV Charging Parties have no comments on the Multiple-Use Applications proposal items at this time.

3. Non-Generator Resource

The Joint EV Charging Parties have no comments on the Non-Generator Resource proposal items at this time.

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About eMotorWerks

eMotorWerks, an Enel Group Company, developed and operates JuiceNet*, the leading electric vehicle (EV) cloud-based smart charging platform, and the company is the manufacturer of best-selling and best-rated residential EV charging station, the JuiceBox Pro, through Amazon.com and its own web store, with over 25,000 charging stations sold worldwide to date. eMotorWerks embeds the JuiceNet platform in its own residential and commercial EV charging stations, as well as third-party electric vehicle supply equipment (EVSE), including models from AeroVironment, Clipper Creek, Volta, Nayax, and a growing list of other manufacturers. eMotorWerks was acquired by Enel Group in October 2017.

About ChargePoint

ChargePoint is the largest electric vehicle (EV) charging network in the world, with charging solutions for every charging need and all the places EV drivers go: at home, work, around town and on the road. With more than 40,000 independently owned charging spots and more than 7,000 customers (including workplaces, cities, retailers, apartments, hospitals and fleets), ChargePoint is the only charging technology company on the market that designs, develops and manufactures hardware and software solutions across every category. Leading EV hardware makers, automakers and other partners rely on the ChargePoint network to make charging station details available in mobile apps, online and in navigation systems for popular EVs. ChargePoint drivers have completed more than 28 million charging sessions, saving upwards of 27 million gallons of gasoline and driving more than 662 million gas-free miles.

About Volta Charging

Founded in 2010, San Francisco-based Volta has developed, proven and fine-tuned an innovative approach to EV charging. Partnering with national brands that sponsor the public amenity, Volta deploys and operates networked chargers at prominent and convenient community venues such as shopping centers and civic entertainment districts. Charging is offered free to drivers, while site hosts benefit from hardware, installation and lifetime maintenance at no cost. The strategic destinations and careful siting of Volta community charging drive both high-utilization and high-visibility, establishing Volta as an incredibly effective catalyst for EV adoption. Last year in California, Volta stations powered more than 7 million free electric miles, avoiding nearly 3.1 million pounds of CO2 and delivering an industry-record average of 7 charges per Level 2 port daily. More than two thirds of non-EV drivers who see Volta's charging amenities say they will consider a plug-in electric vehicle for their next car purchase.

About Chanje Energy, Inc.

Chanje Energy is a California-based OEM delivering medium duty electric vehicles and turnkey energy infrastructure services for the last mile industry. We're focused on creating sustainable solutions that improve how companies move people and packages from transportation hubs to their final destinations.

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