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PowerFlex Response to EVSE Vandalism RFI

Additional submitted attachment is included below.



February 18, 2025

California Energy Commission
Docket Unit, MS-4
715 P Street
Sacramento, CA 95814

Re: Docket No. 22-EVI-04 — PowerFlex Response to the Request for Information Electric Vehicle Charger Vandalism and Cable Theft

California Energy Commissioners and Staff:

PowerFlex appreciates the opportunity to comment on the California Energy Commission's (Commission's) Request for Information Electric Vehicle Charger Vandalism and Cable Theft (RFI). PowerFlex is a leading installer, owner, and operator of distributed energy resources (DERs) including electric vehicle supply equipment (EVSE). PowerFlex has installed more than 13,000 EVSE in California. With this experience and perspective in mind, PowerFlex offers the following responses.

1. Please describe you or your organization's experience with charger vandalism and cable theft.
 - a. Is vandalism a chronic issue for you or your organization, or more episodic?

PowerFlex Response: Episodic, but it does recur once it's begun.

- b. Do you or your organization view vandalism as a minor issue or a more serious issue that is affecting the reliability of your network and your drivers' charging experiences?

PowerFlex Response: Generally, vandalism is not a major issue that impacts the reliability of our charging network as a whole. Vandalism has occurred at a small percentage of our overall sites (less than 1%), so it has not presented widespread reliability challenges.

- c. If a chronic issue, is it widely and randomly distributed, or is it focused in particular geographic area(s)? If it occurs in specific geographic area(s), please describe the types of locations and the types of vandalism. Are there common characteristics (location, charger, type, and so forth) among chargers that are more frequently vandalized? Does the vandalism include theft of equipment to sell, such as charger cables and associated copper? Or is vandalism typified by malicious damage?

PowerFlex Response: The primary damage is cutting cables to sell the copper. This is evidenced by a clean cut of the copper cable. Infrequently and randomly, there is damage due to improper use or collision with vehicles, evidenced by bent pedestals or ripped cables, rather than a clean cut.

Most theft and intentional vandalism occur in lower income and/or lower traffic areas, such as office parks that have no tenants, above other types of locations.

- d. What are the most frequent targets of vandalism? Cables, connectors, power cabinets, or other components?

PowerFlex Response: Almost exclusively cables.

- e. Do you systematically track vandalism incidents as part of your maintenance and operations? If so, do you maintain data on the frequency, distribution, and severity of such incidents? Is your organization willing to share this data with the CEC publicly or privately?

PowerFlex Response: We do not track this data today

- f. What is the average time to repair vandalized chargers?

PowerFlex Response: The repair is usually about half an hour per cable replacement, not including travel time. We do encounter delays when site hosts are either wary of installing a new bay of copper right after a theft, or if the property owner/manager would like to have the cost of repair run through their insurance, which is common though not universal.

- g. On a percentage basis, what portion of your network has been unavailable to drivers due to vandalism over the past 12 months? Please specify your calculation basis, for example, in terms of the number of ports or sites, and specify your definition of "available." Are there regions of the state where these percentages are greater and the problem more acute?

PowerFlex Response: Less than 1% of our installed ports have had systematic vandalism in the past year. More ports have had random cable pull-outs, but these are clearly due to misuse of the charger rather than acts of vandalism.

- h. How many charging ports (number rather than percentage) in your network have been unavailable to drivers due to vandalism over the past 12 months? Are there regions of the state where the quantity is greater and the problem more acute?

PowerFlex does not have a response for this question at this time.

- i. What are the financial impacts to your organization's network from vandalism? How much does it cost to repair and replace vandalized equipment, such as cables that have been cut and stolen for their copper? Please delineate the costs between AC and DC chargers.

PowerFlex Response: The overall cost of vandalism to our organization depends on which party takes the risk of vandalism, such as the customer or PowerFlex. However, even when the customer takes the financial risk, vandalism is still a major concern for us as we want to ensure reliable chargers are available for customers upon demand. A charger cable replacement costs around \$300 - \$350 for parts and labor (not including travel time).

- j. Please describe any approaches you have used to mitigate vandalism.



PowerFlex Response: Following vandalism events, we evaluate with the site host whether it makes sense to replace the cables immediately or delay, as in the case of a currently unoccupied office building. Additionally, we advise increasing security at the parking facility by adding patrols, lighting, and cameras.

PowerFlex appreciates the opportunity to participate in and provide these responses to the Commission's RFI and looks forward to collaborating with the Commission on this topic in the future. Respectfully,

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