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ChargePoint Comments

Additional submitted attachment is included below.

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ChargePoint, Inc. 254 East Hacienda Avenue | Campbell, CA 95008 USA +1.408.841.4500 or US toll-free +1.877.370.3802

February 18, 2025

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

RE: Docket No. 22-EVI-04

To Whom It May Concern:

Please find attached to this letter responses to the Commission's Request for Information on Electric Vehicle Charger Vandalism and Cable Theft posted on 1/14/25 in Docket 22-EVI-04. ChargePoint thanks the Commission for its attention to this important topic. ChargePoint has been a proactive innovator in responding to vandalism and cable theft. ChargePoint's recently introduced cut resistant cable and ChargePoint Protect alarm system are industry leading solutions that will assist station owners in protecting their assets and drive confidence in the EV charging network. We look forward to continued dialogue with the Commission and the industry to support a more robust and reliable charging network.

Sincerely,

Justin Wilson Sr. Director, Regulatory Policy and Programs ChargePoint, Inc.

About ChargePoint

ChargePoint is a world leading electric vehicle (EV) charging network, providing scalable solutions for every charging scenario from home and multifamily to workplace, parking, hospitality, retail, and transport fleets of all types. ChargePoint's cloud subscription platform and software-defined charging hardware is designed to enable businesses to support drivers, add the latest software features and expand fleet needs with minimal disruption to overall business.

ChargePoint's hardware offerings include Level 2 (L2) and DC fast charging (DCFC) products, and ChargePoint provides a range of options across those charging levels for specific use cases including light duty, medium duty, and transit fleets, multi-unit dwellings, residential (multi-family and single family), destination, workplace, and more. ChargePoint's software and cloud services enable EV charging station site hosts to manage charging onsite with features like Waitlist, access control, charging analytics, and real-time availability. With modular design to help minimize downtime and make maintenance and repair more seamless, all products are also UL-listed and CE (EU) certified, and Level 2 solutions are ENERGY STAR[®] certified.

ChargePoint's primary business model consists of selling smart charging solutions directly to businesses and organizations while offering tools that empower station owners to deploy EV charging designed for their individual application and use case. ChargePoint provides charging network services and datadriven, cloud-enabled capabilities that enable site hosts to better manage their charging assets and optimize services. For example, with those network capabilities, site hosts can view data on charging station utilization, frequency and duration of charging sessions, set access controls to the stations, and set pricing for charging services. These features are designed to maximize utilization and align the EV driver experience with the specific use case associated with the specific site host. Additionally, ChargePoint has designed its network to allow other parties, such as electric utilities, the ability to access charging data and conduct load management to enable efficient EV load integration onto the electric grid.

Questions and Selected 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?
 - i. Response: Vandalism is an ongoing issue for ChargePoint's customers throughout California and the US, however it is episodic in certain areas, and we suspect cable cutting vandalism may be impacted by the price of copper, as observed in other sectors like telecommunications, leading to fluctuations in frequency and location.
 - 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?
 - i. Response: Vandalism is a serious issue. In certain instances, vandalism can take down entire sites for a period of time, negatively impacting station reliability and the driver experience. In locations with fewer chargers, the impacts are acutely felt by drivers who need to charge while traveling or do not have access to other convenient charging locations.
 - 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?

- i. Response: Vandalism can occur in a wide range of geographic areas and types of locations. Often the tools used for vandalism are portable and can be easily moved from one location to another. Vandalism can be motivated for a variety of reasons. We observe that cable cutting, in particular, is likely financially motivated.
- d. What are the most frequent targets of vandalism? Cables, connectors, power cabinets, or other components?
 - i. Response: For the financially motivated criminals, cable cutting is the most likely target, however, criminals who are vandalizing chargers due to other motivations may damage any part of the equipment including display screens, connectors, and cable management systems.
- 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?
 - i. Response: ChargePoint tracks repair data, depending on the type of incident and information available from our O&M network we may or may not be able to attribute specific repairs to vandalism.
- f. What is the average time to repair vandalized chargers?
 - i. Response: Repair times will depend on a variety of factors including availability of replacement parts, location of vandalized charger, location of repair personal, financial considerations of owner and operator, need for additional corrective actions to prevent future vandalism.
- 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?
 - i. Response: ChargePoint may be able to work with CEC to discussion in a confidential setting.
- 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?
 - i. Response: ChargePoint may be able to work with CEC to discussion in a confidential setting.
- 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.
 - i. Response: Repair cost will vary greatly depending on the extent of the damage and what components of an EV charging station are damaged. Replacement cables for stations can range from several hundred to multiple thousands of dollars per port.
- j. Please describe any approaches you have used to mitigate vandalism.
 - i. Response: ChargePoint has pioneered <u>two new solutions</u> for station owners to protect their investments. First, ChargePoint announced the charging industry's first cut-resistant charging cable, specifically designed to deter cable theft. ChargePoint's cut-resistant charging cables deter theft and vandalism due to

novel cut-resistant materials built into the cable, designed to make the cable substantially more difficult for would-be vandals to cut while remaining flexible and easy for drivers to comfortably maneuver while in use. ChargePoint intends to make its cut-resistant cables available for all of its commercial and fleet charging stations as well as to selectively license the cable design to other charging station manufacturers as part of an industry leading effort to combat cable theft and vandalism. Second, ChargePoint also announced the launch of ChargePoint Protect, a charger alarm system aimed at further increasing charging station security. ChargePoint Protect integrates a ChargePoint charger's existing speakers, screens and lighting system to create a highly effective alarm system. ChargePoint Protect is capable of detecting charging cable tampering in real time and automatically engaging the alarm system with the aim of deterring vandals. ChargePoint Protect permits ChargePoint customers to receive SMS or email notifications in the event the system's alarm is triggered, accelerating the timing for the station owners to be alerted or the deployment of law enforcement responses.

- 2. How do you recommend the CEC support the prevention and remediation of EV charger cable theft and vandalism?
 - a. Are there site designs or security measures that you have found to be effective?
 i. Response: See above solutions designed by ChargePoint.
 - b. Are there equipment modifications or re-designs that you have found to be effective? For example, are aluminum conductors a plausible option?
 - i. Response: ChargePoint's cut resistant cables will be available for retrofit on many models and could be incorporated to already deployed assets as a way to make the existing network more reliable. ChargePoint believes that CEC should consider any funding for maintenance or repair to be able to utilizes cable cutting and alarm solutions.
 - c. Are there best practices you would recommend?
 - i. Response: See above solutions designed by ChargePoint.
 - d. Are there security measures, design considerations, or best practices you would recommend that the CEC could require for publicly funded chargers?
 - i. Response: CEC may wish to allow for more durable cables such as ChargePoint's cut resistant cables to be used in competitive bid situations without incurring any penalty for any additional cost associated with these options.
 - e. Please provide any other comments, data, information, or recommendations for CEC that would help address this issue.
 - i. No response at this time.