

**DOCKETED**

<b>Docket Number:</b>	22-EVI-04
<b>Project Title:</b>	Electric Vehicle Charging Infrastructure Reliability
<b>TN #:</b>	247307
<b>Document Title:</b>	5 Businesses - Comments on Reliability Standards
<b>Description:</b>	Businesses: The Union of Concerned Scientists, The Natural Resources Defense Council, Coalition for Clean Air, Sierra Club California, and Environmental Defense Fund
<b>Filer:</b>	System
<b>Organization:</b>	The Union of Concerned Scientists, et al.
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	11/4/2022 4:49:52 PM
<b>Docketed Date:</b>	11/4/2022

*Comment Received From: Ray Pingle  
Submitted On: 11/4/2022  
Docket Number: 22-EVI-04*

## **Comments on Reliability Standards**

*Additional submitted attachment is included below.*



November 4, 2022

Mr. Dustin Schell  
Air Resources Engineer  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814  
Docket: 22–EVI–04

**Re: A strong reliability standard is critical to protecting consumers and increasing EV adoption.**

Dear Mr. Schell,

Thank you for the opportunity to comment on the California Energy Commission’s (CEC) workshop on EV charging reliability standards. On behalf of The Union of Concerned Scientists, The Natural Resources Defense Council, Coalition for Clean Air and Sierra Club California , we strongly urge the CEC to develop a robust standard from the perspective of EV drivers — drivers need assurance that chargers will work when they need them if they are to feel confident in purchasing an EV. As the CEC already knows, there is legitimate data already available showing that EV charger reliability is a very real issue affecting drivers, as evidenced by the UC Berkeley study on the reliability of Bay Area DCFCs<sup>1</sup> and Plug In America’s 2022 consumer survey report<sup>2</sup>.

To that end, we offer the following recommendations:

- I. Mandate each individual charger adhere to a minimum 97 percent uptime annually, in alignment with the CEC’s REACH, REV, and NEVI grants.**

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<sup>1</sup> [EV DCFC Reliability 03302022 \(evadoption.com\)](https://www.evadoption.com/)

<sup>2</sup> [EV Consumer Survey Report - \(pluginamerica.org\)](https://www.pluginamerica.org/)

There is strong precedent for requiring each individual charger to adhere to a minimum 97 percent uptime, which translates into less than one day of downtime per month. Besides the aforementioned grants, the Bay Area Air Quality Management District's Charge! Program<sup>3</sup> recently just began requiring 97 percent uptime and the Regional Electric Vehicle Plan for the West recommends 97 percent uptime<sup>4</sup>. Consistency across program requirements ensures drivers have a consistent experience across the state. Once the CEC has evaluated how effectively chargers are adhering to this uptime requirement, it may be worth considering increasing it over time.

**II. Limit the exclusions for calculating uptime to just upstream infrastructure failures and vandalism, as specified by AB 2061, and track total charger downtime.**

AB 2061 clearly specifies which downtime events should be excluded from calculating uptime – downtime events related to the electrical grid, Wi-Fi connectivity, cellular connectivity, and vandalism<sup>5</sup>. We recognize there are issues outside charging providers' control, and some exclusions are appropriate in the calculation of uptime. At the same time, it's critical that CEC and stakeholders have visibility into what consumers are actually experiencing. For this reason, the CEC should limit exclusions added to the list for the purpose of calculating reliability for the purpose of compliance with the standard. In addition, CEC should require charging providers to report all downtime incidents, with reason noted, so the CEC can track total downtime alongside the uptime calculated for the purpose of the standard. That way, CEC may better be able to follow up on upstream points of failure to improve the overall experience of drivers.

**III. We support CEC conducting field monitoring via the groupings specified on slide 32.**

Given state plans to deploy 250,000 chargers by 2025 and 1.2 million by 2030, it's critical to understand the health of existing infrastructure as a progress metric for these goals. Therefore, regardless of any reliability standard the CEC adopts, we strongly support the CEC conducting field testing of existing charging infrastructure via the groups it specified in the workshop. If more chargers are unreliable than previously expected, it may significantly affect projected infrastructure needs across the state.

**IV. We support mandatory data collection to assess the reliability of public infrastructure.**

Mandating reliability data reporting for all public charging stations is an important complement to any field testing. Because field testing of charger reliability is a relatively new concept, test methods are still evolving and therefore any field testing may not tell the full story about charger reliability. Therefore, requiring charging providers to simultaneously report their reliability data can serve as an important complement. Furthermore, charging companies are

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<sup>3</sup> Bay Area Air Quality Management District. *Charge! Program Draft Program Guidance*. September 15, 2022. Page 2.

<sup>4</sup> REV West: Voluntary Minimum Standards. Page 3. [revwest\\_volminimumstandards.pdf \(naseo.org\)](https://www.naseo.org/revwest-volminimumstandards.pdf)

<sup>5</sup> Public Resources Code Section 25231.5(a)(3)(C).

unlikely to report detailed, granular reliability data in the form the CEC needs for it to be useful to its assessment unless mandated to do so.

Thank you for your consideration,

Ray Pingle,  
**Sierra Club California**

Sam Wilson  
**Union of Concerned Scientists**

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