October 18, 2022

National Conference on Weights and Measures
Specifications and Tolerances Committee
Jason Glass, Chair
1135 M Street, Suite 110
Lincoln, NE 68508

Re: EVF-23.5

To the Specifications and Tolerances Committee:

At the 2022 annual meeting, the Committee considered a priority item to remove the "tentative" status of section 3.40, the code on electric vehicle chargers. The Committee accepted a suggestion from the signers of this letter to amend the priority item to exempt DC chargers from accuracy tolerances and testing until 2028. The result is a sensible solution that enables regulators to inspect and enforce a wide range of standards for EV chargers, and to test the accuracy of the chargers for which appropriate testing equipment is available; while not requiring the testing of DC chargers for which that testing equipment is not readily available.

Proposal EVF-23.5 would eliminate that solution by deleting the exemption language that NCWM adopted just months ago. This sort of rapid back-and-forth is inadvisable. Jurisdictions have not even implemented the language from July 2022, and they should have at least some experience with the revised version before NCWM considers reversing what it just adopted.

Moreover, the justification provided for EVF-23.5 says only that existing DC chargers can satisfy a tolerance of 5%. But the ability or inability of DC chargers to meet any particular accuracy tolerance was not the reason NCWM postponed DC accuracy requirements. As we explained at the annual meeting, the problem for DC chargers is the lack of adequate equipment to test accuracy. What is needed is equipment that a field inspector or registered service agent can bring to a site; that will then carry out the test required in Handbook 44, on chargers that in recent years have commonly ranged up to 350 kW in maximum power and 600 amps or more in maximum current; and that has a NIST-traceable calibration for measuring the energy delivered. Without such equipment, an inspector or registered service agent cannot test or certify that a fast DC charger meets a particular accuracy tolerance—regardless of the numerical value of the tolerance.

In July, we observed that the necessary test equipment is not available. There was equipment on the market, with long lead times, that will measure a limited range of DC chargers, and was not NIST traceable. Other testimony confirmed these observations.

NCWM should not reduce the exemption that it adopted in July 2022, until the Committee has received evidence that test equipment is reasonably available to enable the testing that would be required. Proposal EVF-23.5 does not include such evidence.

Sincerely,

Mahesh Albuquerque
State Director
Colorado Department of Labor and Employment

David Appelbaum
Electrify America, LLC

Craig Van Buren
Director, Laboratory Division
Michigan Department of Agriculture and Rural Development

Francesca Wahl
Tesla

Hal Prince
Administrator
Florida Department of Agriculture and Consumer Services

Jeremy Whaling
EVGo

Marc Paquette
Weights and Measures Chief
Vermont Agency of Agriculture, Food and Markets