

Title 4. Business Regulations
FINAL TEXT

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Repaired Element.

Note: Authority cited: Sections 12027 and 12107, Business and Professions Code. Reference: Section 12107, Business and Professions Code.

§ 4002.11. Electrical Vehicle Fueling Systems. (3.40.)

A.1.1. Effective Date for AC EVSE. – All AC EVSE used for commercial purposes shall comply with all requirements of this article in accordance with the following:

(a) All AC EVSE installed prior to January 1, 2021, shall comply with the requirements of this article by January 1, 2031.

(b) All AC EVSE installed on or after January 1, 2021, shall comply with the requirements of this article upon installation.

A.1.2. Effective Dates for DC EVSE. – All DC EVSE used for commercial purposes shall comply with all requirements of this article in accordance with the following:

(a) All DC EVSE installed prior to January 1, 2023, shall comply with the requirements of this article by January 1, 2033.

(b) All DC EVSE installed on or after January 1, 2023, shall comply with the requirements of this article upon installation.

A.4. Type Evaluation. – The National Type Evaluation Program (NTEP) or California Type Evaluation Program (CTEP) will accept for type evaluation only those EVSEs that comply with all requirements of this article and have received safety certification by a nationally recognized testing laboratory (NRTL).

S.1.3.2. EVSE Value of Smallest Unit. – The value of the smallest unit of indicated delivery by an EVSE, and recorded delivery if the EVSE is equipped to record, shall be no greater than 0.0005 MJ or 0.0001 kWh.

S.2.4.1. Unit Price. – An EVSE shall be able to indicate on each face the unit price at which the EVSE is set to compute or to dispense at any point in time during a transaction. A computing EVSE shall display the unit price in whole cents (e.g., \$0.12) or tenths of one cent (e.g., \$0.119) on the basis of price per megajoule (MJ) or kilowatt-hour (kWh). In cases where the electrical energy is unlimited or free of charge, this fact shall be clearly indicated in place of the unit price.

S.2.4.2. Equipment Capacity and Type of Voltage. – An EVSE shall be able to conspicuously display on each face the maximum rate of energy transfer (i.e., maximum power) and the type of current associated with each unit price offered (e.g., 7 kW AC, 25 kW DC, etc.).

S.2.7. Indication of Delivery. – The EVSE shall automatically display on its face the initial zero condition and the quantity delivered (up to the capacity of the indicating elements).

S.3.5. Temperature Range for System Components. – EVSEs shall be accurate and correct over the temperature range of – 40 °C to + 85 °C (– 40 °F to 185 °F). If the system or any measuring system components are not capable of meeting these requirements, the temperature range over which the system is capable shall be stated on the National Type Evaluation Program (NTEP) Certificate of Conformance (CC) or California Type Evaluation

Program (CTEP) Certificate of Approval (COA), conspicuously, legibly, and indelibly marked on the EVSE, and installations shall be limited to the narrower temperature limits.

S.5.2. EVSE Identification and Marking Requirements. – In addition to all the marking requirements of Section 1.10. General Code, paragraph G-S.1. Identification, each EVSE shall have the following information conspicuously, legibly, and indelibly marked:

(a) voltage rating;

(b) maximum current deliverable;

(c) type of current (AC or DC or, if capable of both, both shall be listed);

(d) minimum measured quantity (MMQ); and

(e) temperature limits, if narrower than and within – 40 °C to + 85 °C (– 40 °F to 185 °F).

N.2. Starting Load Test. – A system starting load test may be conducted by applying rated voltage and 0.5-ampere load.

T.2. Load Test Tolerances. – The tolerances for EVSE load tests shall be as shown in Table T.2. Accuracy Classes and Tolerances for EVSE.

Table T.2. Accuracy Classes and Tolerances for EVSE			
<u>Accuracy Class</u>	<u>Application or Commodity Being Measured</u>	<u>Acceptance Tolerance</u>	<u>Maintenance Tolerance</u>
<u>2.0</u>	<u>AC electricity as a vehicle fuel</u>	<u>1.0 %</u>	<u>2.0 %</u>
<u>5.0¹</u>	<u>DC electricity as a vehicle fuel</u>	<u>2.5 %</u>	<u>5.0 %</u>
<u>2.0²</u>	<u>DC electricity as a vehicle fuel</u>	<u>1.0 %</u>	<u>2.0 %</u>
<p>¹The tolerance values for Accuracy Class 5.0 DC EVSE are applicable to devices installed prior to January 1, 2033.</p> <p>²The tolerance values for Accuracy Class 2.0 DC EVSE are applicable to devices installed on or after January 1, 2033.</p>			

Appendix D. Definitions

electricity as vehicle fuel. – Electrical energy transferred to or stored onboard an electric vehicle primarily for the purpose of propulsion. [3.40]

Note: Authority cited: Sections 12027 and 12107, Business and Professions Code. Reference: Sections 12107 and 13400, Business and Professions Code.