
40 C.F.R. § 86.1815–27

Battery-related requirements for battery electric vehicles and plug-in hybrid electric vehicles.

Except as specified in paragraph (h) of this section, battery electric vehicles and plug-in hybrid electric vehicles must meet requirements related to batteries serving as a Rechargeable Energy Storage System from GTR No. 22 (incorporated by reference, see § 86.1). The requirements of this section apply starting in model year 2027 for vehicles at or below 6,000 pounds GVWR. The requirements of this section start to apply for vehicles above 6,000 pounds GVWR when they are first certified to Tier 4 NMOG+NO_x bin standards under § 86.1811–27(b), not later than model year 2031. The following clarifications and adjustments to GTR No. 22 apply for vehicles subject to this section:

- (a) Manufacturers must install an operator-accessible display that monitors, estimates, and communicates the vehicle's State of Certified Energy (SOCE) and include information in the application for certification as described in § 86.1844. Display SOCE as a percentage expressed at least to the nearest whole number. Manufacturers that qualify as small businesses under § 86.1801–12(j)(1) must meet the requirements of this paragraph (a) but are not subject to the requirements in paragraphs (c) through (g) of this section; however, small businesses may trade credits they generate from battery electric vehicles and plug-in hybrid electric vehicles for a given model year only if they meet requirements in paragraphs (c) through (g) of this section.
- (b) Requirements in GTR No. 22 related to State of Certified Range do not apply.
- (c) Evaluate SOCE based on measured Usable Battery Energy (UBE) values. Use the Multi-Cycle Range and Energy Consumption Test described in 40 CFR 600.116–12(a) for battery electric vehicles and either the UDDS Full Charge Test (FCT) or the HFET FCT as described in 40 CFR 600.116–12(c)(11) for plug-in hybrid electric vehicles. For medium-duty vehicles, perform testing with test weight set to Adjusted Loaded Vehicle Weight.

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