NIST Handbook 130 Method of Sale
for Electrical Energy as Vehicle Fuel

B. Uniform Regulation for the Method of Sale of Commodities

as adopted by

The National Conference on Weights and Measures\*

1. Background

The National Conference on Weights and Measures (NCWM) has long been concerned with the proper units of measurement to be used in the sale of all commodities. This approach has gradually broadened to concerns of standardized package sizes and general identity of particular commodities. Requirements for individual products were at one time made a part of the Weights and Measures Law or were embodied in separate individual Model Regulations. In 1971, this “Model State Method of Sale of Commodities Regulation” was established (renamed in 1983); amendments have been adopted by the Conference almost annually since that time.

Sections with “added 1971” dates refer to those sections that were originally incorporated in the Weights and Measures Law or in individual Model Regulations recommended by the NCWM. Subsequent dates reflect the actual amendment or addition dates.

The 1979 edition included for the first time requirements for items packaged in quantities of the International System of Units (SI), the modernized metric system, as well as continuing to present requirements for inch-pound quantities. It should be stressed that nothing in this Regulation requires changing to the SI system of measurement. SI values are given for the guidance of those wishing to adopt new SI quantities of the commodities governed by this Regulation. SI means the International System of Units as established in 1960 by the General Conference on Weights and Measures and interpreted or modified for the United States by the Secretary of Commerce.

This Regulation assimilates all of the actions periodically taken by the Conference with respect to certain food items, non-food items, and general method of sale concepts. Its format is such that it will permit the addition of individual items at the end of appropriate sections as the need arises. Its adoption as a regulation by individual jurisdictions will eliminate the necessity for legislative consideration of changes in the method of sale of particular commodities. Such items will be able to be handled through the normal regulation-making process.

2. Status of Promulgation

The table beginning on page 10 shows the status of adoption of the Uniform Regulation for the Method of Sale of Commodities.

\*The National Conference on Weights and Measures (NCWM) is supported by the National Institute of Standards and Technology (NIST) in partial implementation of its statutory responsibility for “cooperation with the states in securing uniformity in weights and measures laws and methods of inspection.”

The Method of Sale (MOS) regulation shown below was adopted by the July 2013 NCWM and will be published in the 2014 NIST Handbook 130 *Uniform Laws and Regulations in the Areas of Legal Metrology and Engine Fuel Quality* Part IV. Uniform Regulations, Subpart B. Uniform Regulation for the Method of Sale of Commodities, Section 2. Non-food Products. For states that adopt the handbook by reference this regulation becomes effective January 1, 2014.

**Uniform Regulation for the Method of Sale of Commodities**

Section 2. Non-food Products [***NOTE 1***, page 107]

**2.34. Retail Sales of Electrical Energy Sold as a Vehicle Fuel.**

**2.34.1. Definitions.**

**2.34.1.1. Electrical Energy sold as vehicle fuel.** – Electrical energy transferred to and/or stored onboard an electric vehicle primarily for the purpose of propulsion.

**2.34.1.2. Electric vehicle supply equipment (EVSE). –** The conductors, including the ungrounded, grounded, and equipment grounding conductors; the electric vehicle connectors; attachment plugs; and all other fittings, devices, power outlets, or apparatuses installed specifically for the purpose of measuring, delivering, and computing the price of electrical energy delivered to the electric vehicle.

**2.34.1.3. Fixed service.** – Service that continuously provides the nominal power that is possible with the equipment as it is installed.

**2.34.1.4. Variable service.** – Service that may be controlled resulting in periods of reduced, and/or interrupted transfer of electrical energy.

**2.34.1.5 Nominal power.** – Refers to the “intended” or “named” or “stated” as opposed to “actual” rate of transfer of electrical energy (i.e., power).

**2.34.2. Method of Retail Sale.** – All electrical energy kept, offered, or exposed for sale and sold at retail as a vehicle fuel shall be in units in terms of the megajoule (MJ) or kilowatt-hour (kW·h). In addition to the fee assessed for the quantity of electrical energy sold, fees may be assessed for other services; such fees may be based on time measurement and/or a fixed fee.

**2.34.3. Retail Electric Vehicle Supply Equipment (EVSE) Labeling.**

1. 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 (kW·h). In cases where the electrical energy is unlimited or free of charge, this fact shall be clearly indicated in place of the unit price.
2. For fixed service applications, the following information shall be conspicuously displayed or posted on the face of the device:
	1. the level of EV Service expressed as the nominal power transfer (i.e., nominal rate of electrical energy transfer), and
	2. the type of electrical energy transfer (e.g., AC, DC, wireless, etc.).
3. For variable service applications, the following information shall be conspicuously displayed or posted on the face of the device:
	1. the type of service (i.e., “Variable”);
	2. the minimum and maximum power transfer that can occur during a transaction, including whether service can be reduced to zero;
	3. the conditions under which variations in electrical energy transfer will occur; and
	4. the type of electrical energy transfer (e.g., AC, DC, wireless, etc.).
4. Where fees will be assessed for other services in direct connection with the fueling of the vehicle, such as fees based on time measurement and/or a fixed fee, the additional fees shall be displayed.
5. The EVSE shall be labeled in accordance with 16 CFR, PART 309 – FTC Labeling Requirements for Alternative Fuels and Alternative Fueled Vehicles.
6. The EVSE shall be listed and labeled in accordance with the National Electric Code® (NEC) NFPA 70, Article 625 Electric Vehicle Charging Systems ([www.nfpa.org](http://www.nfpa.org)).

**2.34.4. Street Sign Prices and Other Advertisements.**

Where electrical energy unit price information is presented on street signs or in advertising other than on the EVSE:

1. The electrical energy unit price shall be in terms of price per megajoule (MJ) or kilowatt‑hour (kW·h) in whole cents (e.g., $0.12) or tenths of one cent (e.g., $0.119). In cases where the electrical energy is unlimited or free of charge, this fact shall be clearly indicated in place of the unit price.
2. In cases where more than one electrical energy unit price may apply over the duration of a single transaction to sales to the general public, the terms and conditions that will determine each unit price and when each unit price will apply shall be clearly displayed.
3. For fixed service applications, the following information shall be conspicuously displayed or posted:
	1. the level of EV Service expressed as the nominal power transfer (i.e., nominal rate of electrical energy transfer), and
	2. the type of electrical energy transfer (e.g., AC, DC, wireless, etc.).
4. For variable service applications, the following information shall be conspicuously displayed or posted:
5. the type of delivery (i.e., “Variable”);
6. the minimum and maximum power transfer that can occur during a transaction, including whether service can be reduced to zero;
7. the conditions under which variations in electrical energy transfer will occur; and
8. the type of electrical energy transfer (e.g., AC, DC, wireless, etc.).

Where fees will be assessed for other services in direct connection with the fueling of the vehicle, such as fees based on time measurement and/or a fixed fee, the additional fees shall be included on all street signs or other advertising.

(Added 2013)