§ 120.115  Applicability to existing vessels.

(a) Except as otherwise required by paragraphs (b) and (c) of this section, an existing vessel must comply with the regulations on electrical installations, equipment, and material that were applicable to the vessel on March 16, 1996, or, as an alternative, the vessel may comply with the regulations in this part.

(b) An existing vessel must comply with the requirements of §§ 120.420 and 120.430 of this part.

(c) New installations of electrical equipment and material, and the repair or replacement of wire and cable, on an existing vessel, which are completed to the satisfaction of the cognizant Officer in Charge, Marine Inspection (OCMI) on or after March 11, 1996, must comply with this part. Replacement of existing equipment, not including wire or cable, installed on the vessel prior to March 11, 1996, need not comply with the regulations in this part.

Subpart B—General Requirements

§ 120.200  General design, installation, and maintenance requirements.

Electrical equipment on a vessel must be installed and maintained to:

(a) Provide services necessary for safety under normal and emergency conditions;

(b) Protect passengers, crew, other persons, and the vessel from electrical hazards, including fire, caused by or originating in electrical equipment, and electrical shock;

(c) Minimize accidental personnel contact with energized parts; and

(d) Prevent electrical ignition of flammable vapors.

§ 120.210  Protection from wet and corrosive environments.

(a) Electrical equipment used in the following locations must be dripproof:

(1) A machinery space;

(2) A location normally exposed to splashing, water washdown, or other wet conditions within a galley, a laundry, or a public washroom or toilet room that has a bath or shower; or

(3) Another space with a similar moisture level.

(b) Electrical equipment exposed to the weather must be watertight.

(c) Electrical equipment exposed to corrosive environments must be of suitable construction and corrosion-resistant.

§ 120.220  General safety provisions.

(a) Electrical equipment and installations must be suitable for the roll, pitch, and vibration of the vessel underway.

(b) All equipment, including switches, fuses, lampholders, etc., must be suitable for the voltage and current utilized.

(c) Receptacle outlets of the type providing a grounded pole or a specific direct current polarity must be of a configuration that will not permit improper connection.

(d) All electrical equipment and circuits must be clearly marked and identified.

(e) Any cabinet, panel, box, or other enclosure containing more than one source of power must be fitted with a sign warning persons of this condition and identifying the circuits to be disconnected.

Subpart C—Power Sources and Distribution Systems

§ 120.310  Power sources.

(a)(1) Each vessel that relies on electricity to power the following loads must be arranged so that the loads can be energized from two sources of electricity:

(i) The vital systems listed in §119.710 of this chapter;

(ii) Interior lighting except for decorative lights;

(iii) Communication systems including a public address system required under §121.610 of this chapter; and

(iv) Navigation equipment and lights.

(2) Except as provided in §120.312 of this part, a vessel with batteries of adequate capacity to supply the loads specified in paragraph (a)(1) of this section for three hours, and a generator or alternator driven by a propulsion engine, complies with the requirement in paragraph (a)(1) of this section.

(b) Where a ship service generator driven by a propulsion engine is used as a source of electrical power, a vessel