overcurrent device may be used, provided it is less than 150 percent of the conductor’s current-carrying capacity.

(h) An overcurrent device must be installed to protect each motor conductor and control apparatus against overcurrent due to short circuit or ground fault. Each overcurrent device must be capable of carrying the starting current of the motor.

(i) An emergency switch must be provided in each normally ungrounded main supply conductor from a battery. The switch must be accessible from the battery and located as close as practicable to it.

(j) No grounded conductor of a circuit may be disconnected by a switch or circuit breaker unless the ungrounded conductors are all simultaneously disconnected.

(k) A means of disconnect must be provided on the supply side of and adjacent to each fuse, to de-energize the fuse for inspection and maintenance.

(l) A way for locking the means of disconnect open must be provided unless the means of disconnect for a fused circuit is within sight of the equipment that the circuit supplies.

(m) Each fuse must be of the cartridge type and be listed by Underwriters Laboratories (UL) or another independent laboratory recognized by the Commandant.

(n) Each circuit breaker must meet UL 489 and be of the manually-reset type designed for—

1. Inverse delay;
2. Instantaneous short-circuit protection; and
3. Switching duty if the breaker is used as a switch.

(o) Each circuit breaker must indicate whether it is open or closed.

§ 129.390 Shore power.

Each vessel that has an electrical system operating at more than 50 volts and has provisions for receiving shore power must meet the requirements of this section:

(a) A shore-power-connection box or receptacle must be permanently installed at a convenient location.

(b) A cable connecting the shore-power-connection box or receptacle to the switchboard or main distribution panel must be permanently installed.

(c) A circuit breaker must be provided at the switchboard or main distribution panel for the shore-power connection.

(d) The circuit breaker, required by paragraph (c) of this section, must be interlocked with the feeder circuit breakers for the vessel’s power sources to preclude the vessel’s power sources and shore power from energizing the vessel’s switchboard simultaneously, except in cases where system devices permit safe momentary paralleling of OSV power with shore power.

§ 129.395 Radio installations.

A separate circuit, with overcurrent protection at the switchboard, must be provided for at least one radio installation. Additional radios, if installed, may be powered from a local lighting power source, such as the pilothouse lighting panel, provided each radio power source has a separate overcurrent protection device.

Subpart D—Lighting Systems

§ 129.410 Lighting fixtures.

(a) Each globe, lens, or diffuser of a lighting fixture must have a high-strength guard or be made of high-strength material, except in accommodations, the pilothouse, the galley, or similar locations where the fixture is not subject to damage.

(b) No lighting fixture may be used as a connection box for a circuit other than the branch circuit supplying the fixture.

(c) Each lighting fixture must be installed as follows:

1. Each lighting fixture and lamp holder must be fixed. No fixture may be supported by the screw shell of a lamp holder.

2. Each pendant-type lighting fixture must be suspended by and supplied through a threaded rigid-conduit stem.

3. Each table lamp, desk lamp, floor lamp, or similar equipment must be so secured in place that it cannot be displaced by the roll, pitch, or heave or by the vibration of the vessel.

(d) Each lighting fixture in an electrical system operating at more than 50 volts must comply with UL 595,