

§ 129.315

(i) Any system identified as a vital system in §128.130(a) of this subchapter.

(ii) Interior lights.

(iii) Communication systems.

(iv) Navigational equipment and lights.

(v) Fire-protection equipment.

(2) A vessel with batteries of enough capacity for 3 hours of continuous operation to supply the loads specified in paragraph (a)(1) of this section, and with a generator or alternator driven by a propulsion engine, complies with paragraph (a)(1) of this section.

(b) Where a generator driven by a propulsion engine is used as a source of electrical power, no speed change, throttle movement, or change in direction of the propeller shaft of the vessel may interrupt power to any of the loads specified in paragraph (a)(1) of this section.

§ 129.315 Power sources for OSVs of 100 or more gross tons.

(a) The requirements of this section apply instead of those in subpart 111.10 of this chapter.

(b) If a generator provides electrical power for any system identified as a vital system by §128.130(a) of this subchapter, at least two power-generating sets must be provided. At least one set must be independent of the main propulsion plant. A generator not independent of the main propulsion plant must comply with §111.10-4(d) of this chapter. With any one generating set stopped, the remaining set or sets must provide the power necessary for the loads required by this section.

§ 129.320 Generators and motors.

(a) Each generator and motor, except a submersible-pump motor, must be—

(1) In an accessible space, adequately ventilated and as dry as practicable; and

(2) Mounted above the bilges to avoid damage by splash and to avoid contact with low-lying vapors.

(b) Each generator and motor must be designed for an ambient temperature of 50 °C (122 °F), except that—

(1) If the ambient temperature, in the space where a generator or motor is, does not exceed 40 °C (104 °F) under normal operating conditions, the gener-

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ator or motor may be designed for an ambient temperature of 40 °C (104 °F); and

(2) A generator or motor designed for an ambient temperature of 40 °C (104 °F) may be used in a location where the ambient temperature is 50 °C (122 °F), if the generator or motor is derated to 80 percent of the full-load rating and if the rating or setting of the overcurrent devices of the generator or motor is reduced accordingly.

(c) For each generator rated at 50 volts or more, a voltmeter and an ammeter used for measuring voltage and current while the generator is in operation must be provided. For each alternating-current generator, a means for measuring frequency must also be provided. To ensure satisfactory operation of each generator, additional control equipment and measuring instruments, if needed, must also be provided.

(d) Each generator must have a nameplate attached to it indicating—

(1) Name of manufacturer, type of generator, and designation of frame;

(2) Output in kilowatts, or horsepower rating;

(3) Kind of rating (continuous, overload, or other);

(4) Amperes at rated load, voltage, and frequency;

(5) Number of phases, if applicable;

(6) Type of windings, if DC;

(7) When intended for connection in a normally grounded configuration, the grounding polarity; and

(8) For a generator derated to comply with paragraph (b)(2) of this section, the derated capacity.

(e) Each motor must have attached to it a nameplate containing the information required by Article 430 of NFPA 70.

§ 129.323 Multiple generators.

If an OSV uses two or more generators to supply electricity for the ship's service loads, to comply with §129.310(a) of this subpart, the following requirements must be met:

(a) Each generator must have an independent prime mover.

(b) The circuit breaker of a generator to be operated in parallel with another generator must comply with §§111.12-11(f), 111.30-19(a), and 111.30-25(d) of this chapter.