§ 112.37–1 General.
Each temporary source of emergency power required by Table 112.05–5(a) must consist of a storage battery of sufficient capacity to supply the temporary emergency loads for not less than one-half hour.

Subpart 112.39—Battery Operated Lanterns

§ 112.39–1 General.
(a) Each battery-operated, relay-controlled lantern used in accordance with Table 112.05–5(a) must:
1. Have rechargeable batteries;
2. Have an automatic battery charger that maintains the battery in a fully charged condition; and
3. Not be readily portable.

§ 112.39–3 Operation.
(a) The lanterns must be capable of providing light for at least 3 hours. 
(b) The lantern must be relay-controlled so that the loss of normal power causes the lanterns to light.

Subpart 112.40—Alternating-Current Temporary Source of Supply

§ 112.40–1 General requirements.
Installations requiring alternating current for the operation of communication equipment or other apparatus essential under temporary emergency conditions must be provided with the necessary conversion equipment. If the conversion equipment operates both under normal conditions and under temporary emergency conditions, the conversion equipment must be provided in duplicate.

Subpart 112.43—Emergency Lighting Systems

§ 112.43–1 Switches.
An emergency lighting system must not have a switch, except:
(a) In a distribution panel;
(b) As required in §112.43–5; or
(c) In a circuit that serves a hazardous space such as a paint room or cargo handling room if the switch is located outside of the hazardous location.

§ 112.43–5 Controls on island type vessels.
On an island type vessel, such as a containership, emergency lights for illumination of survival craft launching operations must be controlled from a central location within the island nearest the launching operations or from the navigating bridge.

§ 112.43–7 Navigating bridge distribution panel.
(a) Except as allowed in paragraph (b) of this section, the following emergency lights must be supplied from a distribution panel on the navigating bridge:
1. Navigation lights not supplied by the navigation light indicator panel.
2. Lights for survival craft launching operations under §111.75–16, except as allowed in §112.43–5.
3. Signaling lights.
4. Emergency lights:
   (i) On open decks;
   (ii) On the navigating bridge;
   (iii) In the chartroom;
   (iv) In the fire control room; and
   (v) For navigation equipment.
(b) On a mobile offshore drilling unit, the distribution panel required in paragraph (a) of this section must be in the control room.
(c) Each distribution panel required in paragraphs (a) and (b) of this section...
must have a fused switch or circuit breaker for each branch circuit.

§ 112.43–9 Signaling lights.
Each signaling light must be supplied by a branch circuit that supplies no other equipment.

§ 112.43–11 Illumination for launching operations.
Branch circuits supplying power to lights for survival craft launching operations must supply no other equipment and meet §111.75–16 of this chapter.

§ 112.43–13 Navigation light indicator panel supply.
Each navigation light indicator panel must be supplied:
(a) Directly from the emergency switchboard; or
(b) Be a through feed, without switch or overcurrent protection, from the feeder supply the navigating bridge emergency lighting panel.

§ 112.43–15 Emergency lighting feeders.
For a vessel with fire bulkheads forming fire zones, at least one emergency lighting feeder must supply only the emergency lights between two adjacent main vertical fire zone bulkheads. The emergency lighting feeder must be separated as widely as practicable from any general lighting feeder supplying the same space.

Subpart 112.45—Visible Indicators

§ 112.45–1 Visible indicators.
There must be visible indicators in the machinery space to show:
(a) When an emergency battery is discharging; and
(b) When the automatically controlled emergency power source is supplying the emergency loads.

Subpart 112.50—Emergency Diesel and Gas Turbine Engine Driven Generator Sets

§ 112.50–1 General.
(a) The prime mover of a generator set must have:
(1) All accessories necessary for operation and protection of the prime mover; and
(2) A self-contained cooling system of a size that ensures continuous operation with 100 degrees F (37 degrees C) air.
(b) The fuel used must have a flashpoint of not less than 110 degrees F (43 degrees C).
(c) The room that has the generator set must have intake and exhaust ducts to supply adequate cooling air.
(d) The generator set must be capable of carrying its full rated load within 45 seconds after cranking is started with the intake air, room ambient temperature, and starting equipment at 0°C. The generator’s prime mover must not have a starting aid to meet this requirement, except that a thermostatically-controlled electric water-jacket heater connected to the final emergency bus is permitted.
(e) The generator set must start by hydraulic, compressed air, or electrical means.
(f) The generator set must maintain proper lubrication when inclined to the angles specified in §112.05–5(c), and must be arranged so that it does not spill oil under a vessel roll of 30 degrees to each side of the vertical.
(g) The generator set must shut down automatically upon loss of lubricating oil pressure, overspeed, or operation of a fixed fire extinguishing system in the emergency generator room (see §111.12–1(b) for detailed overspeed trip requirements).
(h) If the prime mover is a diesel engine, there must be an audible alarm that sounds on low oil pressure and high cooling water temperature.
(i) If the prime mover is a gas turbine, it must meet the shutdown and alarm requirements in §58.10–15(f) of this chapter.