

must be arranged so that they can be energized from the final emergency power source.

### **Subpart 112.20—Emergency Systems Having a Temporary and a Final Emergency Power Source**

#### **§ 112.20-1 General.**

This subpart contains requirements applicable to emergency power installations having both a temporary and a final emergency power source.

#### **§ 112.20-3 Normal source for emergency loads.**

(a) The normal source for emergency loads must be the ship's service generating plant.

(b) The power from the ship's service generating plant for the emergency loads must be supplied to the emergency switchboard through automatic transfer switches.

#### **§ 112.20-5 Failure of power from the normal source or final emergency power source.**

(a) If there is a reduction of potential of the normal source by 15 to 40 percent, the loads under § 112.15-1 must be automatically supplied from the temporary emergency power source.

(b) For systems in which a reduction of frequency of the normal source or final emergency power source adversely affects the emergency system and emergency loads, there must be means to transfer the loads under § 112.15-1 to the temporary emergency power source upon a reduction in the frequency of the normal source or final emergency power source.

#### **§ 112.20-10 Diesel or gas turbine driven emergency power source.**

Simultaneously with the operation of the transfer means under § 112.20-5, the diesel engine or gas turbine driving the final emergency power source must start automatically with no load on the final emergency power source.

#### **§ 112.20-15 Transfer of emergency loads.**

(a) When the potential of the final emergency power source reaches 85 to 95 percent of normal value, the emer-

gency loads under § 112.15-5 must transfer automatically to the final emergency power source and, on a passenger vessel, this transfer must be accomplished in no more than 45 seconds after failure of the normal source of power.

(b) When the potential from the normal source has been restored, the emergency loads must be manually or automatically transferred to the normal source, and the final emergency power source must be manually or automatically stopped.

(c) If the potential of the final emergency power source is less than 75 to 85 percent of normal value while supplying the emergency loads, the temporary emergency loads under § 112.15-1 must transfer automatically to the temporary emergency power source.

### **Subpart 112.25—Emergency Systems Having an Automatic Starting Diesel Engine or Gas Turbine Driven Emergency Power Source as the Sole Emergency Power Source**

#### **§ 112.25-1 General.**

This subpart contains requirements applicable to emergency power installations having an automatic starting diesel engine or gas turbine driven emergency power source as the sole emergency power source.

#### **§ 112.25-3 Normal source for emergency loads.**

(a) The normal source for emergency loads must be the ship's service generating plant.

(b) The power from the ship's service generating plant for the emergency loads must be supplied to the emergency switchboard by an automatic transfer switch located at the emergency switchboard.

#### **§ 112.25-5 Failure of power from the normal source.**

If there is a reduction of potential of the normal source by 15 to 40 percent, the diesel engine or gas turbine driving the final emergency power source must start automatically with no load on the emergency power source.