

Remote Annunciator Panel Emergency Power Supply

The requirements in NFPA 99, 2012 edition:

6.4.1.1.17 Alarm Annunciator. A remote annunciator that is storage battery powered shall be provided to operate outside of the generating room in a location readily observed by operating personnel at a regular work station (*see 700.12 of NFPA 70, National Electrical Code*). The annunciator shall be hard-wired to indicate alarm conditions of the emergency or auxiliary power source as follows:

(1) Individual visual signals shall indicate the following:

(a) When the emergency or auxiliary power source is operating to supply power to load

(b) When the battery charger is malfunctioning

(2) Individual visual signals plus a common audible signal to warn of an engine-generator alarm condition shall indicate the following:

(a) Low lubricating oil pressure

(b) Low water temperature (below that required in 6.4.1.1.11)

(c) Excessive water temperature

(d) Low fuel when the main fuel storage tank contains less than a 4-hour operating supply

(e) Overcrank (failed to start)

(f) Overspeed

6.4.1.1.17.1 A remote, common audible alarm shall be provided as specified in 6.4.1.1.17.4 that is powered by the storage battery and located outside of the EPS service room at a work site observable by personnel.

Hard-wired remote annunciators will use the generator storage battery for their emergency power supply. This battery (the car-like battery on the generator) provides them with power to operate under any condition. It is highly unlikely the remote annunciators will have a local battery at or near their location.

NFPA 110, chapter 8 requires facility staff to inspect the generator storage battery weekly, test it monthly, and replaced it immediately during any fault. Facilities should replace the batteries every 24 to 30 months. It also requires the generator to have a constant float-type battery charger with alarms for charger fail, charger AC fail, high battery voltage, and low battery voltage.

Facilities cannot use a remote computer monitor or any kind of wireless device for an annunciator.