(4) The branch circuit that feeds battery-equipped emergency luminaires shall be clearly identified at the distribution panel.
(5) Emergency luminaires that obtain power from a battery-equipped emergency luminaire shall be wired to the battery-equipped emergency luminaires as required in Part II, IV, or V of this article.
(6) Remote luminaires providing lighting for the exterior of an exit door shall be permitted to be supplied by the battery-equipped emergency luminaire serving the area immediately inside the exit door.

Unit equipment serving the area immediately inside the exit door is allowed to supply remote emergency luminaires installed outside the exit door. The normal lighting branch circuit for the area inside the exit door can be used to supply unit equipment that in turn supplies emergency luminaires installed inside and outside the exit door. If the power to the normal lighting branch circuit for the area is interrupted, the indoor and outdoor emergency luminaires will activate, even if the normal branch circuit for exterior lighting remains energized.

Part IV. Emergency System Circuits for Lighting and Power

700.15 Loads on Emergency Branch Circuits. No appliances and no lamps, other than those specified as required for emergency use, shall be supplied by emergency lighting circuits.

700.16 Emergency Illumination.

(A) General. Emergency illumination shall include means of egress lighting, illuminated exit signs, and all other luminaires specified as necessary to provide required illumination.

Δ **(B) System Reliability.** Emergency lighting systems shall be designed and installed so that the failure of any illumination source cannot leave in total darkness any space that requires emergency illumination. Emergency lighting control devices in the emergency lighting system shall be listed for use in emergency systems. Listed unit equipment in accordance with 700.12(H) shall be considered as meeting the provisions of this section.

Informational Note: See 700.23 through 700.26 for applications of emergency system control devices.

For unit equipment, a second lamp ensures that the area is not left in total darkness. This section does not require redundant batteries, control circuitry, or light-emitting diode (LED) drivers.

(C) Discharge Lighting. Where high-intensity discharge lighting such as high- and low-pressure sodium, mercury vapor, and metal halide is used as the sole source of normal illumination, the emergency lighting system shall be required to operate until normal illumination has been restored.

High-intensity discharge (HID) luminaires take some time to fully illuminate once they are energized. Therefore, if HID luminaires are the sole source of normal illumination in an area, the *NEC*® requires that the emergency lighting system operate not only until the normal system is returned to service but also until the HID luminaires provide illumination. This requirement does not apply if another type of luminaire, such as an incandescent, also normally illuminates the area.

(D) Disconnecting Means. Where an emergency system is installed, emergency illumination shall be provided in the area of the disconnecting means required by 225.31 and 230.70, as applicable, where the disconnecting means are installed indoors.

Exception: Alternative means that ensure that the emergency lighting illumination level is maintained shall be permitted.

Δ **700.17 Branch Circuits for Emergency Lighting.** Branch circuits that supply emergency lighting shall be installed to provide service from a source complying with 700.12 when the normal supply for lighting is interrupted. Such installations shall provide either of the following:

(1) An emergency lighting supply, independent of the normal lighting supply, with provisions for automatically transferring the emergency lights upon the event of failure of the normal lighting supply.
(2) Two or more branch circuits supplied from separate and complete systems with independent power sources. One of the two power sources and systems shall be part of the emergency system, and the other shall be permitted to be part of the normal power source and system. Each system shall provide sufficient power for emergency lighting purposes.

Unless both systems are used for regular lighting purposes and both are kept lighted, means shall be provided for automatically energizing either system upon failure of the other. Either system or both systems shall be permitted to be a part of the general lighting of the protected occupancy if circuits supplying lights for emergency illumination are installed in accordance with other sections of this article.

The emergency lighting supply must be independent of the normal lighting supply and must automatically operate when there is a failure of the branch circuit(s) supplying the normal lighting.

Section 700.17(2) requires emergency lighting to be supplied by a minimum of two branch circuits from separate systems with different power sources. Where a failure of the normal lighting branch circuit activates the emergency lighting supply, an area supplied by only one lighting branch circuit would be in total darkness if that branch circuit were to fail. For example, if a single branch circuit, supplied by an emergency circuit panelboard, supplies the lighting in a stairwell (means of egress), a failure of that branch circuit leaves the stairwell in total darkness. If two branch circuits from separate power sources are run to the stairwell, it is unlikely that both circuits to the stairway would fail simultaneously; therefore, the risk to occupants created by total darkness is minimized.

700.18 Circuits for Emergency Power. For branch circuits that supply equipment classed as emergency, there shall be