Remediation Interpretation Bulletin – Exit Signs and Lighting (3.6.5)

Scope
This interpretation clarifies requirements governing the installation and arrangement of emergency power supplies for exit signs and light in section 3.6.5 in the Alliance Fire Safety and Structural Integrity Standard (version 1.1) for factories inspected by the Alliance for Bangladesh Worker Safety, its staff, and designated Qualified Assessment Firms and their employees.

Purpose
This interpretation addresses situations in which existing battery-operated signs or means of egress lights are supplied from electrical circuits within a building that are subject to disconnection from normal power when the building is not operating.

Alliance Requirements
An emergency power system shall be provided to supply power to the following loads: ... Exit signs and means of egress illumination.

Existing battery-operated or uninterruptible power supply systems can be continued to be used to supply exit signs and means of egress illumination where monthly testing of such systems is conducted and properly documented.

Background
Existing factories employing battery-operated exit signs and means of egress illumination often connect these devices to local electrical circuits controlled by molded case circuit breakers (MCCB) or switches subject to isolation or disconnection when the building is not operating. This condition causes the devices to operate on battery power until the battery power supply is exhausted. Routine and repeated operation of the devices in this fashion reduces battery performance and may damage the devices rendering them inoperative in an emergency.

The Alliance Standard requires internally-illuminated exit signs and emergency power duration not less than 60 minutes. Both of these requirements are in excess of the requirements in BNBC Part 8 Section 1.5. BNBC Part 8 Chapter 2 does not describe the arrangement of emergency power circuits or normal power supplies for battery-operated exit signs and means of egress lighting.

Discussion
To ensure reliable operation and prevent inadvertent disconnection or isolation when the building is not operating, battery-operated exit signs and means of egress lighting should be supplied by circuits that are connected to the normal power supply through emergency power circuits arranged and installed as provided in Article 700 of the NFPA 70® National Electrical Code®. These circuits do not require connection to a transfer switch and power from an emergency or standby generator. This arrangement will permit the signs and lights to charge normally and activate in the only event of loss of primary or mains power to the building.
Instructions
1. Verify that existing battery-operated exit signs and means of egress lighting are not subject to disconnection or isolation from normal power when the building is not operating.
2. Confirm normal electrical power to battery-operated exit signs and means of egress lighting conforms to Article 700 of NFPA 70® National Electrical Code®.
3. Confirm that routine testing of battery-operated exit signs and means of egress lighting is conducted at monthly intervals and properly recorded.

Changes
1. Corrected reference to “Quality Assurance Firms” in Scope to read “Qualified Assessment Firms.”

Authority

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