Tentative Interim Amendment

NFPA® 855

Standard for the Installation of Stationary Energy Storage Systems

2023 Edition

Reference: 9.5.3.1.1.2, 9.5.3.1.1.3(new), and A.9.5.3.1.1.3(3)(new)
TIA 23-2
(SC 23-8-65 / TIA Log #1746)

Pursuant to Section 5 of the NFPA *Regulations Governing the Development of NFPA Standards*, the National Fire Protection Association has issued the following Tentative Interim Amendment to NFPA 855, *Standard for the Installation of Stationary Energy Storage Systems*, 2023 edition. The TIA was processed by the Technical Committee on Energy Storage Systems, and was issued by the Standards Council on August 25, 2023, with an effective date of September 14, 2023.

1. Revise paragraph 9.5.3.1.1.2 to read as follows:

9.5.3.1.1 Rooftop Installations.

9.5.3.1.1.1 Installations shall be permitted on rooftops of buildings that do not obstruct fire department rooftop operations when approved.

9.5.3.1.1.2 ESS comprised of units with a maximum stored energy greater than 20 kWh, and associated equipment, that are located on rooftops and not enclosed by building construction shall comply with the following:

(1~~-4~~) The roofing materials under and within 5 ft (1.5 m) horizontally from an ESS or associated equipment shall ~~be~~ comply with one of the following:

(a) Be noncombustible

(b) ~~or shall have~~ Have a Class A rating when tested in accordance with ASTM E108 or UL 790~~.~~

(2~~3~~) ESS and associated equipment shall be located from the edge of the roof a distance equal to at least the height of the system, equipment, or component but not less than 5 ft (1.5 m).

(3~~6~~) Installations on rooftops over 75 ft (23 m) in height above grade shall be permitted ~~when~~ where approved by the AHJ.

(4~~9~~) The ESS shall be a minimum of 10 ft (3 m) from the fire service access point on the rooftop.

(5~~1~~) Stairway access to the roof for emergency response and fire department personnel shall be provided either through a bulkhead from the interior of the building or a stairway on the exterior of the building.

(6~~7~~) Access, service space, guards, and handrails shall be provided where required by the local building and mechanical codes.

(7~~2~~) Service walkways at least 5 ft (1.5 m) in width shall be provided for service and emergency personnel from the point of access to the roof to the system.

(8~~5~~) A Class I standpipe outlet shall be installed at an approved location on the roof level of the building or in the stairway bulkhead at the top level.

(9~~8~~) A ~~radiant~~ radiant-energy-sensing fire detection system complying with Section 4.8 shall be provided to protect the ESS.

2. Add new section 9.5.3.1.1.3 and associated Annex text to read as follows:

9.5.3.1.1.3 Individual ESS units with a maximum stored energy of 20 kWh or less that are located on rooftops shall comply with all of the following:

(1) The systems shall be listed in accordance with 4.6.1.

(2) The systems shall comply with 9.5.3.1.1.2(1) through 9.5.3.1.1.2(4).

(3)* The systems shall comply with the fire and explosion testing requirements in its intended installation configuration.

(4) The ESS unit shall meet the unit level fire performance requirements of indoor residential units as identified in UL 9540A.
(5) Each ESS unit shall be spaced a minimum of 3 ft (0.9m) from other units, except as provided in 9.5.3.1.1.3 (6).
(6) The AHJ shall be permitted to approve a smaller distance based on performance criteria from fire and explosion testing complying with 9.1.5.
A.9.5.3.1.1.3(3) This item addresses concerns related to radiant energy on nearby flammable components such as batteries under a PV array. UL 9540A fire testing should be done on a representative installation configuration. Other siting considerations include minimum distances, installation instructions, or relevant safety standards that might address this new application of ESS such as UL 2703, which covers the fire rating of the PV system (i.e., PV modules, racking, and roofing) and might need to consider the effect of additional components in the testing.

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