

Tentative Interim Amendment

NFPA[®] 25

Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems

2014 Edition

Reference: Various **TIA 14-1** (*SC 18-8-19 / TIA Log #1364*)

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 25, *Standard for Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, 2014 edition. The TIA was processed by the Technical Committee on Inspection, Testing, and Maintenance of Water-Based Systems, and was issued by the Standards Council on August 14, 2018, with an effective date of September 3, 2018.

A Tentative Interim Amendment is tentative because it has not been processed through the entire standards-making procedures. It is interim because it is effective only between editions of the standard. A TIA automatically becomes a public input of the proponent for the next edition of the standard; as such, it then is subject to all of the procedures of the standards-making process.

 Add a new reference to 2.2 NFPA Publications to read as follows:
 2.2 NFPA Publications. ... NFPA 70E[®], Standard for the Electrical Safety in the Workplace[®], 2012 edition.

2. Revise 4.9.6* and the associated Annex material to read as follows:

4.9.6* Electrical Safety. Legally required precautions shall be taken when testing or maintaining electric controllers for motor-driven fire pumps. <u>At a minimum, the provisions of *NFPA 70E*[®], *Standard for the Electrical Safety in the Workplace*[®], or equivalent shall be applied.</u>

A.4.9.6 WARNING: NFPA 20, *Standard for the Installation of Stationary Pumps for Fire Protection*, includes electrical requirements that discourage the installation of a disconnect means <u>and limit overcurrent protection</u> in the power supply to electric motor-driven fire pumps. This is intended to ensure the availability of power to the fire pumps. Where equipment connected to those circuits is serviced or maintained, the service person could be subject to unusual exposure to electrical and other hazards. It could be necessary to establish special safe work practices and to use safeguards or personal protective clothing, or both. The required category of personal protective equipment will vary dependent upon the specific installation details and associated incident energy levels. The determination of such incident energy levels can be established by conducting an incident energy level analysis as provided in Annex D of *NFPA 70E* or by utilization of the PPE category method provided by *NFPA 70E*, Table 130.7(C)(15)(a) where applicable. Use of the PPE category method requires that the maximum available short circuit current and maximum fault clearing time for the actual installation do not exceed those indicated in NFPA 70E, Table 130.7(C)(15)(a). See also *NFPA 70E* for additional safety guidance regarding the determination of the incident energy and the required level of personal protective equipment. The provisions of *NFPA 70E* require that the owner label the equipment with information regarding the electrical hazards associated with the installation. Where such labeling is not present, the technician cannot make a determination for safe work practice on the equipment without further assessment of the incident energy associated with the installation.

3. Revise the Electrical System section of Table 8.1.2 and add a new note at the end of the Table to read as follows: Table 8.1.2 Alternative Fire Pump Inspection, Testing, and Maintenance Procedures

Complete as Applicable	Visual Inspection	Inspect	Change	Clean	Test	Frequency
 Electrical System						
Fighten electrical connections as necessary		X				Annually
Lubricate mechanical moving parts (excluding starters and relays)		Х				Annually
Calibrate pressure switch settings [*]		Х				Annually
Grease motor bearings		Х				Annually
			Х			Annually or as needed
Voltmeter and ammeter for accuracy (5%)		X				Annually
Any corrosion on printed circuit boards (PCBs)-	X					Annually
Any cracked cable/wire insulation*	Х					Annually
Any leaks in plumbing parts [*]	Х					Annually
Any signs of water on electrical parts [*]	Х					Annually

*Required only where the conduct of such work can be completed without the opening of an energized electric motordriven fire pump controller.

4. Revise 8.3.3.2(2)(a) to read as follows:

8.3.3.2 The pertinent visual observations, measurements, and adjustments specified in the following checklists shall be conducted annually while the pump is running and flowing water under the specified output condition:

(2) At each flow condition as follows:

(a) Where external means is provided on the controller, rRecord the electric motor voltage and current (all lines)

(c) Record the simultaneous (approximately) readings of pump suction and discharge pressures and pump discharge flow

5. Add a new 8.3.3.5.1 and associated Annex material to read as follows:

8.3.3.5.1* Alarm sensors located within electric motor-driven fire pump controllers that cannot be accessed without opening an energized electric motor-driven fire pump controller shall be tested at an alternative location outside of the controller.

A.8.3.3.5.1 Testing at an alternative location can include completion of a test at an external fire alarm monitor module used to monitor the sensors within the fire pump controller.

6. Revise 8.3.3.6 and associated Annex material to read as follows:

8.3.3.6* Safety. SubsSection 4.9.6 shall be followed for safety requirements while working near electric motor-driven fire pumps. At a minimum, the provisions of *NFPA 70E*[®], *Standard for the Electrical Safety in the Workplace*[®], or equivalent shall be applied.

A.8.3.3.6 See also NFPA 70E for additional safety guidance A.4.9.6.

7. Revise 8.3.7.5 and 8.3.7.6 to read as follows:

8.3.7.5 Where measured, cCurrent and voltage readings whose product does not exceed the product of the rated voltage and rated full-load current multiplied by the permitted motor service factor shall be considered acceptable.
8.3.7.6 Where measured, vVoltage readings at the motor within 5 percent below or 10 percent above the rated (i.e., nameplate) voltage shall be considered acceptable.

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⁽b) Record the pump speed in rpm