

## NFPA 70E® - Proposed 2018 Edition

Standard for Electrical Safety in the Workplace®

TIA Log No.: 1265

Reference: 110.4(A), 130.2(A)(3), 130.6(C)(2), 130.6(F) and 130.6(G)

Comment Closing Date: July 13, 2017

Submitter: Bobby J. Gray, Hoydar/Buck, Inc.

1. Revise paragraph 110.4(A) to read as follows:

**110.4(A) Testing.** Only qualified persons shall perform tasks such as testing, troubleshooting, and voltage measuring on electrical equipment operating at voltages equal to or greater than 50 volts V<sub>ac</sub> ~~or 100 V<sub>dc</sub>~~.

2. Revise paragraph 130.2(A)(3) to read as follows:

**130.2(A)(3) Equipment Operating at Less Than 50 Volts V<sub>ac</sub>** ~~or 100 V<sub>dc</sub>~~. Energized electrical conductors and circuit parts that operate at less than 50 volts V<sub>ac</sub> ~~or 100 V<sub>dc</sub>~~ shall not be required to be de-energized where the capacity of the source and any overcurrent protection between the energy source and the worker are considered and it is determined that there will be no increased exposure to electrical burns or to explosion due to electric arcs.

3. Revise paragraph 130.6(C)(2) to read as follows:

**130.6(C)(2) Obstructed View of Work Area.** Where lack of illumination or an obstruction precludes observation of the work to be performed, employees shall not perform any task within the limited approach boundary of energized electrical conductors or circuit parts operating at voltages equal to or greater than 50 volts ~~or 100 volts~~ or where an electrical hazard exists.

4. Revise paragraph 130.6(F) to read as follows:

**130.6(F) Confined or Enclosed Work Spaces.** Where an employee works in a confined or enclosed space (such as a manhole or vault) that contains exposed energized electrical conductors or circuit parts operating at voltages equal to or greater than 50 volts ~~or 100 volts~~, or where an electrical hazard exists, the employer shall provide, and the employee shall use, protective shields, protective barriers, or insulating materials as necessary to avoid inadvertent contact with these parts and the effects of the electrical hazards.

5. Revise paragraph 130.6(G) to read as follows:

**130.6(G) Doors and Hinged Panels.** Doors, hinged panels, and the like shall be secured to prevent their swinging into an employee and causing the employee to contact exposed energized electrical conductors or circuit parts operating at voltages equal to or greater than 50 volts ~~or 100 volts~~ or where an electrical hazard exists if movement of the door, hinged panel, and the like is likely to create a hazard.

**Substantiation:** During the first draft meeting, the TC placed the threshold for a shock hazard at 100 Vdc at a number of locations in the document. During the second draft meeting, the TC determined that dc voltages above 50 are a shock hazard. A task group identified locations where the 100 Vdc threshold was added to the language in the first draft and was directed to remove the references. This TIA identifies five locations that were overlooked during the second draft meeting. Failure to correct his oversight could create a hazardous condition such that a user of the standard would fail to de-energize parts operating above the 50 Vdc threshold before making contact.

**Emergency Nature:** The standard contains an error or an omission that was overlooked during the regular revision process.

The NFPA 70E has determined that dc systems operating above 50 volts presents a shock hazard and should be suitably guarded, isolated, or insulated before a worker approaches nearer than a safe distance. Failure to implement this TIA creates a condition that would fail to communicate that hazard to a worker or employer.

*Anyone may submit a comment by the closing date indicated above. To submit a comment, please identify the number of the TIA and forward to the [Secretary, Standards Council](#), 1 Batterymarch Park, Quincy, MA 02169-7471.*