803 KAR 2:016. Construction industry standards.

RELATES TO: KRS Chapter 338

STATUTORY AUTHORITY: KRS Chapter 13A

NECESSITY, FUNCTION, AND CONFORMITY: KRS 338.051 and 338.061 authorize the Kentucky Occupational Safety and Health Standards Board to adopt and promulgate occupational safety and health rules, administrative regulations, and contains those standards to be enforced by the Division of Occupational Safety and Health Compliance. The Occupational Safety and Health Standards Board hereby adopts the following administrative regulations applicable to the construction industry.

Section 1. Safety and Testing of Supply Lines in Excess of 600 Volts. (1) Definitions.

(a) Disconnected means disconnected from any electrical source of supply.

(b) Guarded: protected by personnel, covered, fenced, or enclosed by means of suitable castings, barrier, rails, screens, mats, platforms, or other suitable devices in accordance with standard barricading techniques designed to prevent dangerous approach or contact by persons or objects. (Note: wires, which are insulated but not otherwise protected, are not considered as guarded.)

(c) Hold cards: (also called "hold tags") a card or tag-type device, usually having a predominant color of white or red which warns against or which cautions against the operation of a particular switch, device, circuit, tool, machine, etc.

(d) Near: a distance no closer than that shown in the table in subsection (3)(c) of this section.

(e) Qualified person: a person who, because of experience and training is familiar with the construction and operation of the apparatus or equipment and the hazards involved in the performance of the job.

(2) Purpose.

(a) The intent and purpose of this administrative regulation is to provide and establish safety procedures for testing equipment to protect electrical workers from hazards resulting from exposure to high voltage.

(b) This administrative regulation shall apply to nonutility electrical workers who are engaged in electrical construction and/or maintenance of electrical conductors and equipment rated at 600 volts and above.

(3) Energized conductors and equipment.

(a) Only qualified employees shall work on or near high voltage conductors or equipment.

(b) Personal protective equipment shall be provided by the employer and used by the employee when working on or near energized, ungrounded high voltage conductors or equipment.

(c) No employee shall approach or take any conductive object, without an approved insulating handle, within the minimum distance specified in the table below, unless the energized part is insulated or guarded from the employee, or the employee is effectively insulated from the live parts. Rubber gloves (sleeves if necessary) rated for the voltage involved shall be considered effective insulation of the employee from the energized part.

Minimum Clear Distance From Live Parts	
Voltage Phase to Phase (Kilovolts)	Distance Phase to Employee
0.6 to 34.5	2'
34.5 to 46	2 1/2'
46 to 69	3'
69 to 115	3' 4"
115 to 138	3' 6"

138 to 169	3' 8"

(4) Deenergized conductor or equipment.

(a) Existing conditions shall be determined before starting work on electrical conductor and/or equipment.

(b) Before any work is performed, all electrical switches, breakers and associated disconnecting devices shall be opened, made inoperable and hold tagged out by the person in charge. Employees shall be trained and thoroughly instructed in the tagging procedure. One (1) qualified person, for example: foreman, general foreman or first class electrician, of each crew shall be responsible for attaching hold tags and/or hold cards to the disconnecting means. When more than one (1) crew is involved in the work, multiple hold tags or hold cards shall be placed in the handle of the disconnecting equipment. The use of such tags must be respected. Equipment or items so tagged must not be activated or used without full and proper authority of a responsible person whose signature appears on the tag.

(c) Conductors shall be short-circuited and grounded wherever possible.

(d) Capacitors may be components of apparatus of the disconnected electrical system. Before employees are allowed to work, the capacitors shall be discharged, short-circuited and grounded.

(e) When deenergizing conductors and equipment and the means of disconnecting from the energy source is not visibly open, a voltage test shall be made before starting work. An operational check shall be made of the voltage tester prior to and following the voltage test to determine reliability of the testing device. The test device must be handled and used while wearing or using approved protective equipment during the test.

(f) All conductors and equipment shall be treated as energized until tested, short-circuited and effectively grounded except when the circuit involved is isolated from all possible sources of energizing voltage from another circuit, induced voltage or back feed.

(g) The voltage condition of deenergized conductors and/or equipment shall be determined with testing equipment designed for the applicable voltage.

(h) Upon completion of work on deenergized conductors and equipment, the person responsible shall ascertain that all employees under his jurisdiction are clear and that all protective short-circuit and grounding lines are removed. The qualified person(s) shall then remove his hold tag(s). Only at this time shall conductors and equipment be reenergized. (3 Ky.R. 794; Am. 4 Ky.R. 106; eff. 8-3-77; 234; eff. 2-1-78; 323; eff. 5-3-78; 7 Ky.R. 917; eff. 7-1-81; 10 Ky.R. 302; eff. 12-2-83; TAm eff. 8-9-2007; TAm eff. 9-8-2011.)