

**Part 40. Electrical Safety-Related Work Practices  
Compared With  
29 C.F.R. 1910 Subpart S – Electrical**

The comparisons show only those provisions where MIOSHA rules are different than OSHA or where MIOSHA rules are not included in 29 C.F.R.

<b>MIOSHA</b>	<b>OSHA</b>
<p><b>R 408.14003. Selection and use of work practices. Rule 4003. (1) When work is performed near or on equipment or circuits which are or may be energized,</b> safety related work practices shall be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts. The specific safety-related work practices shall be consistent with the nature and extent of the associated electrical hazards.</p> <p><b>R 408.14004 Working on or near exposed de-energized parts. Rule 4004.</b> (1) This rule applies to work on exposed deenergized parts and to work that is near enough to exposed de-energized parts to expose an employee to any electrical hazard the parts present. Conductors and parts of electric equipment that have been de-energized, but have not been locked out in accordance with the provisions of subrule (2) of this rule, shall be treated as energized parts and the provisions of R 408.14005 apply to work on or near such parts.</p> <p>(2) While any employee is exposed to contact with parts of fixed electrical equipment or circuits which have been deenergized, the circuits energizing the parts shall be locked out in accordance with the requirements of this rule. The requirements shall be followed in the order in which they are presented. As used in this section, "fixed electrical equipment" means equipment that is fastened in place or connected by permanent wiring methods. Lockout procedures that comply with current lockout requirements will also be deemed to comply with the requirements of this rule. Where lockout is required by this part, if a lock cannot be employed or if the employer can demonstrate that tagging procedures will provide safety equivalent to a lock, a tag may be used without a lock. In such cases a tag shall be in compliance with all of the following requirements:</p> <p>(a) A tag shall be of a distinctive employer design that clearly prohibits unauthorized energizing of the circuits and removal of the tag.</p> <p>(b) A tag shall not be used without an additional safety measure, such as the removal of an isolating circuit element, the blocking of a controlling switch, or the opening of an extra disconnecting device.</p> <p>(c) All persons who have access to controlling devices shall be trained in, and familiar with, the employer's tagging procedures.</p> <p>(d) Meet the requirements of general industry safety standard Part 37. Accident Prevention Signs and Tags, being R 408.13701 et seq., of the Michigan Administrative Code.</p> <p>(9) The requirements of this rule shall be met before any circuits or equipment can be considered to be de-energized and before any circuits or equipment can be</p>	<p><b>1910.333(a)</b> "General." Safety-related work practices shall be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts, when work is performed near or on equipment or circuits which are or may be energized. The specific safety-related work practices shall be consistent with the nature and extent of the associated electrical hazards.</p> <p><b>1910.333(b)</b> <b>"Working on or near exposed deenergized parts."</b> 1910.333(b)(1) "Application." This paragraph applies to work on exposed deenergized parts or near enough to them to expose the employee to any electrical hazard they present. Conductors and parts of electric equipment that have been deenergized but have not been locked out or tagged in accordance with paragraph (b) of this section shall be treated as energized parts, and paragraph (c) of this section applies to work on or near them. 1910.333(b)(2) "Lockout and Tagging." While any employee is exposed to contact with parts of fixed electric equipment or circuits which have been deenergized, the circuits energizing the parts shall be locked out or tagged or both in accordance with the requirements of this paragraph. The requirements shall be followed in the order in which they are presented (i.e., paragraph (b)(2)(i) first, then paragraph (b)(2)(ii), etc.). Note 1: As used in this section, fixed equipment refers to equipment fastened in place or connected by permanent wiring methods. Note 2: Lockout and tagging procedures that comply with paragraphs (c) through (f) of 1910.147 will also be deemed to comply with paragraph (b)(2) of this section provided that: [1] The procedures address the electrical safety hazards covered by this Subpart; and [2] The procedures also incorporate the requirements of paragraphs (b)(2)(iii)(D) and (b)(2)(iv)(B) of this section. 1910.333(b)(2)(i) "Procedures." The employer shall maintain a written copy of the procedures outlined in paragraph (b)(2) and shall make it available for inspection by employees and by the Assistant Secretary of Labor and his or her authorized representatives. Note: The written procedures may be in the form of a copy of paragraph (b) of this section. 1910.333(b)(2)(ii) "Deenergizing equipment." 1910.333(b)(2)(ii)(A) Safe procedures for deenergizing circuits and equipment shall be determined before circuits or equipment are</p>

<p>worked on. A qualified person shall operate the equipment operating controls or otherwise verify that the equipment cannot be restarted. A qualified person shall use test equipment to test the circuit elements and electrical parts of equipment to which employees will be exposed and shall verify that the circuit elements and equipment parts are de-energized. The test shall also determine if any energized condition exists as a result of inadvertently induced voltage or unrelated voltage back feed, even though specific parts of the circuit have been de-energized and presumed to be safe. If the circuit to be tested is more than 600 volts, nominal, the test equipment shall be checked for proper operation immediately before and immediately after this test.</p> <p>(10) All of the following requirements shall be met, in the order presented, before circuits or equipment is reenergized, even temporarily:</p> <p>(b) Employees who are exposed to the hazards associated with reenergizing the circuit or equipment shall be warned to stay clear of circuits and equipment.</p> <p>(c) Each lock shall be removed by the employee who applied it or by an employee who is under his or her direct supervision. However, if the employee who applied the lock is absent from the workplace, then the lock, if removed, shall be removed by a qualified person who is designated to perform this task if both of the following provisions are complied with:</p> <p>(i) The employer ensures that the employee who applied the lock is not available at the workplace.</p> <p>(ii) The employer ensures that the employee who applied the lock is aware that the lock has been removed before he or she resumes work at that workplace.</p> <p>(d) There shall be a visual determination that all employees are clear of the circuits and equipment.</p> <p><b>R 408.14005. Working on or near exposed energized parts.</b>  <b>Rule 4005.</b>  (2) Only qualified persons may work on electric circuit parts or equipment that have not been de-energized under the procedures specified in R 408.14004. Such persons shall be trained to work safely on energized circuits and shall be familiar with the proper use of all of the following:</p> <p>(a) Special precautionary techniques.  (b) Personal protective equipment.  (c) Insulating and shielding materials.</p>	<p>deenergized.</p> <p>1910.333(b)(2)(iii)(B)  Each tag shall contain a statement prohibiting unauthorized operation of the disconnecting means and removal of the tag.</p> <p>1910.333(b)(2)(iii)(C)  If a lock cannot be applied, or if the employer can demonstrate that tagging procedures will provide a level of safety equivalent to that obtained by the use of a lock, a tag may be used without a lock.</p> <p>1910.333(b)(2)(iii)(D)  A tag used without a lock, as permitted by paragraph (b)(2)(iii)(C) of this section, shall be supplemented by at least one additional safety measure that provides a level of safety equivalent to that obtained by use of a lock. Examples of additional safety measures include the removal of an isolating circuit element, blocking of a controlling switch, or opening of an extra disconnecting device.</p> <p>1910.333(b)(2)(iii)(E)  A lock may be placed without a tag only under the following conditions:</p> <p>1910.333(b)(2)(iii)(E)(1)  Only one circuit or piece of equipment is deenergized, and</p> <p>1910.333(b)(2)(iii)(E)(2)  The lockout period does not extend beyond the work shift, and</p> <p>1910.333(b)(2)(iii)(E)(3)  Employees exposed to the hazards associated with reenergizing the circuit or equipment are familiar with this procedure.</p> <p>1910.333(b)(2)(iv)  Verification of deenergized condition. The requirements of this paragraph shall be met before any circuits or equipment can be considered and worked as deenergized.</p> <p>1910.333(b)(2)(iv)(A)  A qualified person shall operate the equipment operating controls or otherwise verify that the equipment cannot be restarted.</p> <p>1910.333(b)(2)(iv)(B)  The test shall also determine if any energized condition exists as a result of inadvertently induced voltage or unrelated voltage backfeed even though specific parts of the circuit have been deenergized and presumed to be safe. If the circuit to be tested is over 600 volts, nominal, the test equipment shall be checked for proper operation immediately after this test.</p> <p><b>1910.333(c)</b>  <b>"Working on or near exposed energized parts."</b>  1910.333(c)(2)  "Work on energized equipment." Only qualified persons may work on electric circuit parts or equipment that have not been deenergized under the procedures of paragraph (b) of this section. Such persons shall be capable of working safely on energized circuits and shall be familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools.</p>
---	---

<p>(d) Insulating tools. (e) Testing equipment.</p> <p><b>R 408.14009. Safeguards for personnel working in electrical hazard areas.</b> <b>Rule 4009.</b> (1) An employee who works in an area where there are recognized electrical hazards shall be provided with, and shall use, electrical protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed. The appropriateness of the protective equipment shall be determined pursuant to the provisions of general industry safety standard, Part 33. Personal Protective Equipment, being R 408.13301 et seq. of the Michigan Administrative Code.</p>	<p><b>1910.335 Safeguards for personnel protection.</b> (a) Use of protective equipment – (1) Personal protective equipment. (i) Employees working in areas where there are potential electrical hazards shall be provided with, and shall use, electrical protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed.</p>
---	--

<p style="text-align: center;"><b>Disclaimer:</b></p> <p><b>Documents available from this server were prepared as a courtesy for informal guidance and assistance. This information is not intended to replace or supercede the actual MIOSHA standard or rule requirement. Please reference the specific MIOSHA standard or rule for the actual rule requirement language.</b></p> <p><b>All information published online by MIOSHA is subject to change without notice. Every effort is made to ensure that the information provided at this site is accurate and up-to-date, but no legal responsibility is accepted for any errors, omissions, or misleading statement.</b></p>
---