

WAC 296-45-335 Deenergizing lines and equipment for employee protection. (1) Application. This section applies to the deenergizing of transmission and distribution lines and equipment for the purpose of protecting employees. Control of hazardous energy sources used in the generation of electric energy is covered in WAC 296-45-175. Conductors and parts of electric equipment that have been deenergized under procedures other than those required by WAC 296-45-175 or 296-45-335, as applicable, must be treated as energized.

(2) "General."

(a) If a system operator is in charge of the lines or equipment and their means of disconnection, all of the requirements of subsection (3) of this section must be observed, in the order given.

(b) If no system operator is in charge of the lines or equipment and their means of disconnection, one employee in the crew must be designated as being in charge of the clearance. All of the requirements of subsection (3) of this section apply, in the order given, except as provided in subsection (2)(c) of this section. The employee in charge of the clearance must take the place of the system operator, as necessary.

(c) If only one crew will be working on the lines or equipment and if the means of disconnection is accessible and visible to and under the sole control of the employee in charge of the clearance, subsection (3)(a), (c), and (d) of this section do not apply. Additionally, tags required by the remaining provisions of subsection (3) of this section need not be used.

(d) Any disconnecting means that are accessible to persons outside the employer's control (for example, the general public) must be rendered inoperable while they are open for the purpose of protecting employees.

(3) Deenergizing lines and equipment.

(a) In all cases, switching orders must be given directly to the employees in charge of operating the switches by the system operator who has jurisdiction and such communications must be repeated back word for word to the speaker. When requesting clearance on lines under the control of the system operator, a person requesting the clearance must obtain the name of the system operator to whom the request was made and the system operator must obtain the name of the person requesting the clearance; and assure that the person is qualified to receive such a clearance. A qualified electrical employee must make a request of the system operator to have the particular section of line or equipment deenergized. The qualified electrical employee becomes the employee in charge (as this term is used in subsection (2)(b) of this section) and is responsible for the clearance. In giving a clearance, the system operator must make certain that the person to whom the clearance is given is fully aware of the extent or the limits of the clearance.

(b) All switches, disconnectors, jumpers, taps, and other means through which known sources of electric energy may be supplied to the particular lines and equipment to be deenergized must be opened. Such means must be rendered inoperable, unless its design does not so permit, and tagged to indicate that employees are at work.

(c) Automatically and remotely controlled switches that could cause the opened disconnecting means to close must also be tagged at the point of control. The automatic or remote control feature must be rendered inoperable, unless its design does not so permit.

(d) Tags must prohibit operation of the disconnecting means and must indicate that employees are at work.

(e) After the applicable requirements in subsection (3)(a) through (d) of this section have been followed and the employee in charge of the work has been given a clearance by the system operator, the lines and equipment to be worked must be tested to ensure that they are deenergized.

(4) The system operator must order clearance tags printed on red cardboard, or equivalent, not less than 2-1/4 inches by 4-1/2 inches, attached to all switches opened or checked open to provide clearance on any line or equipment for employees to work thereon.

(5) Clearance tags attached to substation control devices and to line switches beyond the switchyard of any substation; indicating the limits of the clearance involved; must state the designation of the switch opened or checked open and tagged; the name of the person to whom the clearance is to be issued; the date and time the switch was opened or checked open; the name of the dispatcher ordering the switching and tagging; and the name of the person doing the switching and tagging.

(6) Protective grounds must be installed as required by WAC 296-45-345.

(7) After the applicable requirements of subsection (3)(a) through (d) of this section have been followed, the lines and equipment involved may be worked as deenergized.

(8) If two or more independent crews will be working on the same lines or equipment, each crew must independently comply with the requirements in subsection (3) of this section.

(9) To transfer the clearance, the employee in charge (or, if the employee in charge is forced to leave the worksite due to illness or other emergency, the employee's supervisor) must inform the system operator; employees in the crew must be informed of the transfer; and the new employee in charge must be responsible for the clearance.

(10) To release a clearance, the employee in charge must:

(a) Notify employees under their direction that the clearance is to be released;

(b) Determine that all employees in the crew are clear of the lines and equipment;

(c) Determine that all protective grounds installed by the crew have been removed; and

(d) Report this information to the system operator and release the clearance.

(11) The person releasing a clearance must be the same person that requested the clearance, unless responsibility has been transferred under subsection (9) of this section.

(12) Tags cannot be removed unless the associated clearance has been released under subsection (10) of this section.

(13) Only after all protective grounds have been removed, after all crews working on the lines or equipment have released their clearances, after all employees are clear of the lines and equipment, and after all protective tags have been removed from a given point of disconnection, may action be initiated to reenergize the lines or equipment at that point of disconnection.

(14) To meet unforeseen conditions, it will be permissible to tag isolated switches for the system operator and issue clearances against this tag. In tagging out inter-utility tie lines, the open switches on the foreign end of the line must be tagged for the foreign system operator requesting the outage who will issue clearances to individuals of the organization against this tag.

(15) Network protectors. The employer need not use the tags mentioned in subsection (3)(d) and (e) of this section on a network protector for work on the primary feeder for the network protector's associated network transformer when the employer can demonstrate all of the following conditions:

(a) Every network protector is maintained so that it will immediately trip open if closed when a primary conductor is deenergized;

(b) Employees cannot manually place any network protector in a closed position without the use of tools, and any manual override position is blocked, locked, or otherwise disabled; and

(c) The employer has procedures for manually overriding any network protector that incorporate provisions for determining, before anyone places a network protector in a closed position, that: The line connected to the network protector is not deenergized for the protection of any employee working on the line; and (if the line connected to the network protector is not deenergized for the protection of any employee working on the line) the primary conductors for the network protector are energized.

(16) Metal-clad, draw-out switchgear of over 600 volts in which the physical separation of the disconnecting parts is not visible may be used to clear a line or equipment, provided the switchgear is equipped with:

(a) A positive positioning means to insure that the disconnecting contacts are separated;

(b) An isolating shutter which moves into place between the separated contact for circuit isolation; and

(c) A mechanically connected indicating means to show that the shutter is in place.

(17) In all other cases, only a visible break of all phases must be regarded as clearing a line or equipment.

(18) No person must make contact with a circuit or equipment that has not been taken out of service to be worked on until they have the circuit or equipment cleared and tagged for themselves or is working directly under the supervision of one who has the circuit or equipment cleared and tagged for themselves.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 19-13-083, § 296-45-335, filed 6/18/19, effective 8/1/19; WSR 16-10-082, § 296-45-335, filed 5/3/16, effective 7/1/16. Statutory Authority: RCW 49.17.010, [49.17].040, [49.17].050 and [49.17].060. WSR 98-07-009, § 296-45-335, filed 3/6/98, effective 5/6/98.]