

13. Electrocution

A 45-year-old climber employed by a tree-trimming service was killed when he contacted an overhead power line in the course of his work. The victim and two co-workers were assigned to cut down three 65-foot tall pine trees at a residential home. The trees sat in a straight line along the home's driveway. Overhead power lines, energized to 23,000 volts phase-to-phase and 13,200 volts phase-to-ground, ran parallel to line of trees. The trees were approximately four feet from the power line. The victim's job was to climb each tree, set a tag line, and use a chain saw to cut the tree down a section at a time. The victim was in one of the trees approximately three feet away from the power line, with his back to it. He was preparing to cut off a four-foot long limb. At this point he needed to descend the tree to below the cut line. He used a positioning device, called a flip line, along with his other climbing equipment to position himself in the tree. The flip line was eight feet long with a steel cable core and synthetic rope covering. It was not insulated. When he unhooked the flip line to descend, it swung around and contacted the energized power line. The victim was electrocuted instantly.

TOSHA Citation(s) as Originally Issued

Citation 1

Item 1a 1910.132(a)	Protective equipment was not used when necessary whenever hazards capable of causing injury or impairment were encountered in that employees did not wear cut-resistant leg protection while using a chain saw.
Item 1b 1910.132(d)(1)	The employer did not assess the workplace to determine if hazards were present, or were likely to be present, which necessitated the use of personal protective equipment.
Item 1c 1910.133(a)(1)	The employer did not ensure that each affected employee uses appropriate eye or face protection when exposed to eye or face hazards from flying wood particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation. (flying wood particles)
Item 1d 1910.135(a)(1)	Each affected employee did not wear a protective helmet when working in areas where there was a potential head injury from falling objects. (hard hats complying with ANSI Z89.1)
Item 1e 1910.136(a)	The employer did not ensure that each affected employee used protective footwear when working in areas where there was a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and/or where such employee's feet were exposed to electrical hazards.
Item 2 1910.151(b)	In the absence of an infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees, there was no person or persons adequately trained to render first aid. Adequate first-aid supplies were not readily available.

Item 3 1910.333(c)(3)(i)(A)(1)

When an unqualified person was working in an elevated position near overhead lines with voltages to ground rated at 50kV or below, the location was not such that the person and the longest conductive object he or she could contact would not come closer to an unguarded, energized overhead line than 10 feet (305cm).

Citation 2

TDLWD Rule
0800-1-3-.05(1)(a)

An oral report of an employment accident resulting in a fatality or the inpatient hospitalization of three or more employees was not made within eight (8) hours after the occurrence to the nearest Area Office of the Division of Occupational Safety and Health or to the TOSHA toll-free central telephone number (1-800-249-8510).

Yellow arrow = 13,200 volt power line
Red arrow = where employee was working



Eight-foot flip line that contacted power line
Yellow arrow = end that made contact

