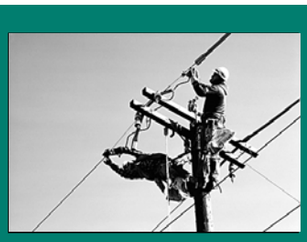
FATALITY INVESTIGATION REPORT

FACE Facts



Maine Department of Labor
Bureau of Labor Standards

MEFACE 0203

Painter Electrocuted When Extension Ladder Contacted Overhead Powerline

The Incident

On July 1, 2003, a 20 year-old male painter was electrocuted when the aluminum ladder he and another painter were raising struck a powerline.

The powerline was located parallel to and about 15 feet to the side of the house and was 26’ 6" above the ground. The survivor of this incident stated that the deceased had both hands on the ladder while he himself had one hand on the rope and one hand on the ladder as they were lifting the ladder up. The aluminum ladder was extended to 27’ 03" and the impact occurred at 26’ 03".

Photo credit: Topsham Police Dept.

Overhead powerline (7,200 Volts), ground clearance = 26.5 ft. and 15 ft. from the side of house. That particular powerline was insulated after the incident.

Regulations and Standards

The Occupational Safety and Health Administration (OSHA) addresses electrical safety in the General Industry Safety and Health Standards, 29 CFR 1910 Subpart S, and Construction Safety and Health Standards, 29 CFR 1926 Subpart K.

29 CFR 1910.333 (c)(3): Overhead lines. If work is to be performed near overhead lines, the lines shall be de-energized and grounded.

29 CFR 1926.416(a)(1): Employees must not work so close to any electric power curcuit that they could come in contact with it.

29 CFR 1926.1053(b)(12): Ladders shall have nonconductive side rails.

Fatality Data

This is the third work-related electrocution fatality involving contact with overhead powerlines recorded by the Maine Workers’ Compensation Board since 1992. Nationally, the Federal Bureau of Labor Statistics recorded 1,310 work-related fatalities due to contact with powerlines (1992-2001). Of these 1,310 fatalities, 29 involved painters where the source of injury is a ladder and the exposure is due to contact with overhead powerlines. (Census of Fatal Occupational Injury Program)

Recommendations

1. Before beginning work at any site, a competent person should evaluate the site to identify any potential hazards and ensure appropriate control measures are implemented.

2. When moving an extension ladder to the next work location, break the ladder down and carry it horizontally before setting it up again.

3. Make sure ladders have nonconductive side rails if they are used where the employee or the ladder could contact exposed energized electrical equipment.
[OSHA Standard 1926.1053(b)(12)]

4. If work is to be performed near overhead powerlines, make sure that the lines are de-energized and grounded, or provide other protective measures before work starts. This can be accomplished by contacting the local power company.
[OSHA Standard 1910.333(c)(3)]