

Subject:	ELECTRICAL
Section:	PPG# 4100.7
Chapter:	Operations
Effective Date:	7/1/98

1.0 POLICY

- 1.1** It shall be the policy of Thurston County Fire District No. 5 & 9 to identify the hazards and employ practices to prevent electric shock when fire suppression or rescue activities must be performed near energized electrical circuits and/ or using electrical apparatus and equipment.
- 1.2** Members shall be trained to identify potential electrical hazards.
- 1.3** Members shall not cut the electrical drip loop providing power to a structure or pull the electrical meter. If the drip loop can not be positively identified, no electrical line shall be cut,
- 1.4** Members shall not work or position equipment above any power line. At an incident, the incident Commander shall not allow anyone but qualified utility workers to work above any power line
- 1.5** Thurston County Fire District No. 5 & 9 will identify with the Power Company all power transmission lines in our jurisdiction
 - 1.5.1** When our fire service equipment and members must work near energized lines rated 50 KV or above the minimum working distance between the lines and any part of our equipment shall be ten feet, plus 4 inches for each additional 1 KV and will follow the recommendations of the power company.
 - 1.5.2** For electrical lines rated 50 KVA or below, the minimum clearance shall be ten feet.
 - 1.5.3** For low voltage lines (operating under 750 volts or less) all activities and work shall be performed to prevent members from contacting the energized lines.
- 1.6** All temporary lighting and extension cords used with 110 - 120 VAC equipment in moist, damp, and/or other hazardous locations shall be approved for that purpose.
- 1.7** 120 VAC cord reels shall be approved for use in damp or hazardous locations.

- 1.8** Twelve-volt portable type hand lanterns shall be constructed of molded composition or other type approved for the purpose.
- 1.9** Portable generators need not be grounded, and the frame can be permitted to serve as the grounding electrode for a system supplied by the generator, if the generator supplies only equipment mounted on the generator or cord-connected and plug connected equipment through receptacles mounted on the generator, or both, and the equipment grounding conductor terminals of the receptacles are bonded to the generator frame.
- 1.10** Vehicle-mounted generators need not be grounded, and the frame of the vehicle can serve as the grounding electrode for a system supplied by the generator, if the generator supplies only equipment located on the vehicle and/or cord-connected and plug connected equipment through receptacles mounted on the vehicle or on generator, and the equipment grounding conductor terminals of the receptacles are bonded to the generator frame.

2.0 RESPONSIBILITIES

- 2.1** The incident commander shall identify potential electrical hazards and request the Power Company to respond and disconnect energized electrical lines.
- 2.2** The Training Officer will identify electrical hazards and incorporate them into training
- 2.3** The Incident Commander will identify high voltage electrical hazards and incorporate them into the emergency operations plan.

3.0 GUIDELINES

- 3.1** Driver/Operators of apparatus will not position apparatus under electrical transmission lines without first identifying the electrical hazard area.
- 3.2** Members will not raise ground ladders until the command " check the overhead" is given and followed to establish the existence of an electrical hazard.
- 3.3** The Incident Commander will be informed as to the existence of overhead electrical hazards
- 3.4** The Incident Commander will be informed as to electrical hazards in the structure or working area.
- 3.5** All lighting equipment and extension cords will be heavy duty, and flexible, with 12-3 conductors and SO or SJ jackets or equivalent.

- 3.5.1** Electrical cords shall have weather tight bodies and caps and be 20 amp

rated at 120 VAC.

- 3.5.2** Temporary lights shall be constructed so that water cannot enter or accumulate in wireways, lampholders or other electrical parts.
- 3.5.3** Temporary lights that are used in moist and/or other hazardous locations shall have 120 VAC single-phase 15 and/or 20 amp in-line resettable ground fault interrupters.
- 3.5.4** Temporary lights shall be equipped with a handle and be insulated from heat and possible electrical shock. They shall also be protected by guards of a nonconductive or insulated material to prevent accidental contact with the bulb.
- 3.5.5** Temporary lights shall not be suspended by their electrical cords unless cords and lights are designed and labeled for this means of suspension.

Cord reel bodies and caps shall be weather tight, 20 amp rated at 120 VAC.

3.6

- 3.6.1** Cords on cord reels that do not exceed 150 feet in length shall be SO or SJ type jackets or equivalent. Cords that exceed 150 feet in length on reels, shall have 10-3 conductors.
- 3.6.2** Cord reels that are not permanently mounted on a vehicle shall be insulated from the ground when in use.

- 3.7** Portable hand lamps shall be operated at a maximum of 12 volts. They shall be equipped with a handle and a guard over the bulb.

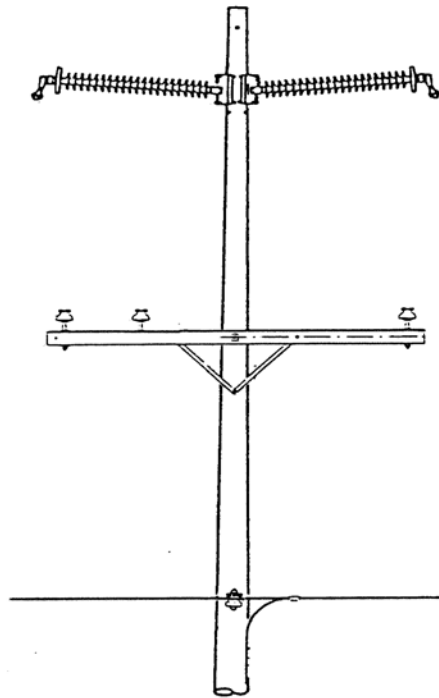
4.0 REFERENCES

WAC 296-305-04511
WAC 296-305-06007

5.0 APPENDIX

- 5.1** Appendix A: Power Lines

POWER LINES



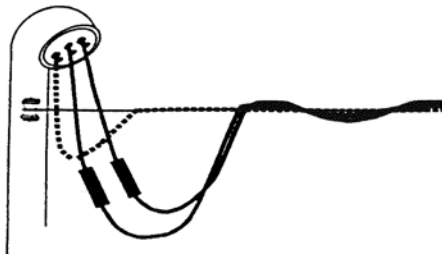
The highest voltage line is at the top of the pole.
See Policy 4100.7

If the power line carries 50 KVA or more, see
Policy 4100.7 Subsection 1.5.1

Do not work over power lines.
See Policy 4100.7 Subsection 1.4

For voltages under 50 KVA,
see Policy 4100.7 Subsection 1.6

Do not touch the neutral line, it can be an
electrical shock hazard



For service lines to structures including low
voltage lines, see Policy 4100.7

Identify all power line electrical hazards.
See Policy 4100.7