

Union County Standard Operating Guidelines  
**Fireground Operations**

**Fireground Operations, SOG 3.40**

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**ELECTRICAL EMERGENCIES**

1. Intent and Purpose
  - a. To provide safe guidelines for the handling of electrical issues in emergency operations.
2. Procedure
  - a. Determine the type of electrical problem and request the appropriate power company to respond, if needed.
  - b. Give the dispatcher the proper location of the incident (i.e. pole number, etc.).
  - c. Set up operational perimeter. Request Police, Sheriff, or OSP assistance when necessary.
  - d. Park apparatus outside of operational perimeter.
3. Safety
  - a. Do not fight electrical fires unless de-energized or life is in danger. Protect exposures.
  - b. Be careful when positioning equipment and hose lines. Electrical lines may fall on apparatus, personnel, or hose lines.
  - c. Do not walk under transformers as some may still contain PCB's or burning oil. Transformers can and do explode.
  - d. Do not open shutters on vaults. This may cause an explosion due to accumulation of flammable gases.
  - e. Keep bystanders clear of hazard area.
  - f. Stay clear of manhole covers over electrical vaults. They have been known to blow off and fly one hundred and fifty feet (150').
  - g. No personnel shall enter underground electrical vaults except to effect rescue and then only when advised by power company personnel on the scene that the vault has been de-energized.
  - h. When entering underground electrical vault (de-energized) to effect rescue, personnel must be in full protective clothing, including a manned lifeline, SCBA, SABA, and air monitoring.
  - i. Toxic gas may be formed from electrical fires in vaults. Take necessary precautions (i.e. SABA, ventilation). Note: SABA may need to be a special request. Provide for possible Decon of personnel and equipment.
  - j. Do not open pole-mounted switches. They are for power company personnel only.
  - k. Do not assume that telephone wires are not hot. They may be in contact with high voltage wires.
  - l. Do not use water to control pole top fires unless de-energized by the power company. Protect exposures.
  - m. Avoid standing in puddles of run-off water during firefighting operations when energized electrical equipment may be involved or nearby.
  - n. Assume that all wires down are HOT/Energized and act accordingly.

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- o. Do not use non-rated equipment such as pike poles, non-rated cutters, and non-rated rope to handle downed wires. **If rated equipment is available UCFD personnel will not use (i.e. Hot Sticks, etc.)**. This is the primary domain of the responding power company.
- 4. Wires Down
  - a. Members should not move wires unless absolutely necessary to rescue victims, and then only after all safety precautions have been observed.
  - b. Position equipment and personnel a minimum of two (2) poles away from downed lines for possible pole collapse.
  - c. Be careful when placing hose lines and apparatus as additional lines may fall.
  - d. Establish a secure area (operational perimeter); include fences, guardrails, railroad tracks, and puddles of water, which may be electrically energized.
  - e. Standby and keep the public away from the scene until wires are de-energized by power company personnel.
- 5. Cutting Wires
  - a. It is UCFD's policy that ***NO member*** cut electrical wires. It is preferable that battery cables be disconnected (not cut) and secured.
- 6. Electrical Fire Control
  - a. Power pole fire – do not extinguish with water unless life is threatened or major component of power pole is threatened or directed to by power company personnel.
  - b. Electrical fires are best handled by shutting down power source.
  - c. CO2 and dry chemical are the best extinguishing agent for electrical fires.
  - d. If structure fire involves electrical service or wiring, the power to the building should be cut off by personnel turning off main breaker (Note: Breaker box to pole is still hot/energized and may not completely de-energize the structure) or having Power Company turning off electric service.
  - e. Electrical vault fires should be extinguished only after they have been de-energized.
  - f. Power company personnel shall be notified anytime UCFD personnel shut off electric service.
  - g. If fire attack must be considered for rescue purposes (***do not use straight solid stream***) use narrow/fog pattern.
- 7. Vehicle Rescue
  - a. Power lines should be considered hot/energized until verified as safe by power company personnel.
  - b. Injured or uninjured victims that are conscious should stay in vehicle until power company personnel can secure power to downed lines. Personnel should not try to remove or treat any victims until power company personnel have de-energized lines.

Do not use pike poles, non-rated ropes and or non-rated equipment to handle downed lines during vehicle rescues. **If rated equipment is available UCFD personnel will not use (i.e. Hot Sticks, etc.)**. This is the primary domain of the responding power company.