

# Electrical Emergency Operations

# A-050

Date: 6-15-2003

## PURPOSE

To provide safe guidelines for the handling of electrical emergency operations.

## POLICY

When it has been determined that an electrical emergency exists these guidelines have been established.

## PROCEDURE

- a) Determine the type of electrical problem and request the appropriate power company to respond, if needed.
- b) Give 911 dispatcher proper location of incident (street address, phone number, etc.).
- c) Set up operational perimeter. Request Police Department assistance when necessary. (The safe practice for establishing electrical incident operational perimeter is to maintain a minimum distance of one complete span of wires on either side of fallen wires.)
- d) Park apparatus outside of operational perimeter.
- e) If manpower is not available to standby, advise 911 a company representative is needed on scene.

## SAFETY

The **TAC** (Tester Alternating Current) can warn of the presence of dangerous voltages. The **DANGER** already exists at the test location and **Extreme caution** is advised when the **TAC** alert tones are sounding.

- a) Do not fight electrical fires unless de-energized. Protect exposures.
- b) Be careful when spotting equipment and hose lines. Electrical lines may fall on apparatus, personnel, or hose lines.
- c) Do not walk under transformers as they may contain PCBs or burning oil. (Remember transformers can and do explode. The transformer may fall from the pole as well.)
- d) Wear protective clothing. Full P.P.E. Command may omit SCBA during exterior operations.
- e) Do not open shutters or hatches on vaults. This may cause an explosion due to the accumulation of flammable gases.
- f) Keep bystanders clear of hazardous area.
- g) Stay clear of manhole covers over electrical vaults - they have been known to blow off and fly as far as one hundred fifty feet.
- h) No personnel shall enter underground electrical vaults; these are confined spaces and contain energized equipment. Fire Department Personnel will stand by to assist Power Company and Designated Confined Space Teams.
- i) Toxic gas may be formed from electrical fires in vaults take necessary precautions.
- j) Do not open pole mounted switches - they are for power company personnel only.
- k) Do not assume that telephone wires are not energized - 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 fire fighting operations when energized electrical equipment may be involved or nearby.
- n) Assume that all wires down are **ENERGIZED** and act accordingly.
- o) Do not use non-electrically rated equipment such as a pike pole to handle downed wires.

### **WIRES DOWN**

- a) Members are not to move wires to rescue victims. Power company representatives will inform command of safety conditions. Advise dispatch of life hazard conditions.
- b) Be careful when spotting hose lines and apparatus additional lines may fall.
- c) Establish a secure area (operational perimeter); include fences, vehicles, guardrails, railroad tracks, and puddles of water that may be electrically energized.
- d) Standby and keep the public away from the scene until wires are de-energized by power company personnel

### **CUTTING WIRES**

Cutting of wires is prohibited by this S.O.G. It is not possible to insure your safety during this type of operation. Power company personnel will handle removal of all wires.

### **ELECTRICAL FIRE CONTROL**

- a) Power pole fire - do not extinguish with water. If life is threatened or a major structural component of the power pole is at risk follow directions of the power company personnel.
- b) Electrical fires are best handled by shutting the down power source.
- c) CO2 or dry chemical are the best extinguishing agents for electrical fires.
- d) If a structure fire involves electrical service or wiring, the power to the building should be shut off.
- e) Electrical vault fires should be extinguished only after they have been de-energized.

### **VEHICLE RESCUE**

- a) Uninjured and injured victims should stay in vehicle until power company personnel can secure power to downed lines.
- b) If it is necessary to care for injured patient or remove patient from vehicle prior to power company arrival, proceed with the proper safety clothing (full turnout gear and face shield or goggles) and TAC electrical safety detector (Will-Burt dielectrically rated Tester-Alternating-Current stick) do not proceed if any indication of hazardous voltage is observed. TAC warning tones, arcing, smoking wires, etc.

#### **WARNING:**

**"NOTICE: IN THE FRONT FOCUSED SETTING, THE UNIT WILL PICK UP SIGNALS ONLY FROM THE FRONT TIP END. DO NOT USE THIS SETTING OR THE LOW SENSITIVITY SETTING WHEN STARTING A SEARCH. THE SENSITIVITY IS GREATLY REDUCED AND THE TAC STICK WILL NO LONGER PICK UP SIGNALS FROM CERTAIN DISTANCES AND DIRECTIONS. EXTREME CAUTION MUST BE EXERCISED TO PREVENT CONTACT WITH LIVE WIRES, WHICH MAY NOT BE DETECTABLE IN THESE SETTINGS. ESPECIALLY WHERE MULTIPLE LIVE WIRES MAY BE PRESENT."**