

GLASTONBURY FIRE DEPARTMENT STANDARD OPERATING GUIDELINES



SOG NUMBER: FDO-510

ISSUED DATE: 12-14-11

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EFFECTIVE DATE: 01-11-16

CATEGORY: EMERGENCY OPERATIONS - GENERAL

SUB- CATEGORY: FIRE GROUND OPERATIONS

SUBJECT: STUCTURE FIRES INVOLVING ELECTRICAL POWER LINES

RELATED GUIDELINES: FDO-107, FDO-509, HZT-202

Section I - Introduction

A. Objective

To provide a common operating guideline for use in the response to a structure fire involving electrical power lines and any other related electrical equipment hazards.

B. Applicability

This applies to any structure fire response were electrical power lines, including cable television lines, telephone lines or related electrical equipment may be involved.

C. References

Eversource Presentation

The United Illuminating Company's - First Responder Beware Electrical Safety Trainer's Guide

Section II - General

In residential and commercial buildings, it is seldom necessary to interrupt the electric service to the entire building. While electric power may be useful for lighting during firefighting, evacuation and overhaul operations it is imperative that the power remains on in any structure when it can be safely done.

Section III - Securing Power to a Structure

When safe firefighting tactics requires that power to a building be secured the following steps should be taken:

Notifying the Utility Company

 Eversource has developed a guideline known as <u>Priority Level System for Emergency Response</u> <u>Involving Electrical Hazards</u>. The priority level is broken down into three levels:

- 1. Priority Level One (Life Threatening)
 - a. A "Level 1" exists in situations where a person or persons cannot be rescued until the electrical company either shuts off the power or disconnects a serve line at the scene. This is a life-threatening situation.
 - i. Example 1: A person (conscious/unconscious) is trapped in a vehicle with a fallen power line lying across it. Injuries are unknown.
 - ii. Example 2: A structure is on fire and a person or persons are trapped. The electric service to the structure is energized limiting appropriate action such as raising a ladder, etc.
- 2. Priority Level Two (Hindering Operations)
 - a. A "Level 2" exists in a situation where an electrical hazard exists that is hindering operations, but is not life threatening.
 - i. Example 1: A structure is on fire, it has been confirmed that no one is inside. The electric service to the structure is energized and the fire department is unable to cut power at the fuse/circuit breaker box.
 - ii. Example 2: A structure fire is in the process of being extinguished. Service wires to the building are hindering or obstructing full access for overhaul and other related operations.
- 3. Priority Level Three (Electrical Hazard Exists Non-Threatening)
 - a. A "Level 3" exists in situations where an electrical hazard exists but is in a location non-threatening or of no immediate threat to life or property.
 - i. Example I: Wires down or transformer fire. Police or fire standing by securing the scene with an appropriate safety zone.
- o If possible and can be accomplished in a safe manner de-energize the fire-affected area by removing the fuse(s), or shutting off the circuit breakers or safety switches as needed.
- o Open the main disconnects to de-energize the entire building
- o If the building is damaged to the extent that the electrical service provides a further hazard or if the main disconnects cannon be utilized the power supply to the building should be interrupted. This should only be done by an authorized representative of Eversource.

Section IV - Pulling the electrical meter to a building:

FIRE DEPARTMENT PERSONNEL ARE PROHIBITED FROM PULLING THE ELECTRICAL METER TO A BUILDING

- 1. Electrical meters are not switches. They have been known to explode, sending out a shower of razor-sharp glass splinters.
- 2. Pulling the electric meter may NOT de-energize the electric service to the building.
 - a. Services over 200 amperes are metered by current transformers. Pulling the electric meter will not shut off the electric supply to the building.
 - b. Some meter bases are equipped with automatic bypasses. When the meter is removed, the bypasses close and the building remains energized.
 - c. People have developed unique methods to bypass the meter.
- 3. If explosive gases are present in the building, the service wire piping can act as a chimney. A small amount of gas may be present in the meter socket and pipe. When the meter is removed, a small arc will occur and the gas may explode.
- 4. If the meter glass is exposed to the heat of a fire, it can build up internal stresses and explode on contact.
- 5. After an electric meter is removed, the energized contacts in the meter socket are left exposed. The exposed contacts present an electrical hazard to anyone who is near the meter base.

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Section V – Approval:

Fire Chief

Date of Approval: