

ELECTRIC SUBSTATIONS

Incidents which require Fire Department personnel to enter electrical substations to rescue and remove persons in need of assistance present very serious potential dangers. In order to operate safely in these situations, special precautions must be taken and rigidly enforced.

All reported fires or explosions in substations should receive a hazardous materials dispatch. The appropriate responsible utility company shall be immediately notified by the dispatcher. Dispatch should also attempt to obtain information about the substation from the utility that may be beneficial to site operations and obtain an ETA on the utility's response to the scene.

It shall be the policy of the Clay County Fire Department's that no fire department personnel enter a substation that is energized to fight a fire. The first arriving company must attempt to gather all available information about the nature of the situation. Reconnaissance should be performed by looking over block walls or through fences. If no victim is located, the company should stand by and wait for the electric utilities troubleshooter to arrive. If a victim is located, personnel should attempt to evaluate the condition and position of the victim. If the victim appears to be stable, the crew should instruct the victim not to move and assume a stand-by posture to wait for additional resources to arrive.

Operations within substations shall be approached with extreme caution. Depending on the type of substation, maximum voltage ranges from 69,000 volts to 500,000 volts. The Fire Department has no equipment that can safely insulate personnel from these voltages. Direct supervision is required and all safety precautions and procedures shall be rigidly enforced. Operations shall be conducted in a manner which avoids premature commitment to unknown risks. A minimum amount of personnel needed to affect a rescue will be allowed to enter. Personnel must always keep in mind the reduced clearances and assume that all equipment inside fenced area is energized. Personnel must stay low, and carry tools horizontal with the ground and below waist level.

The Fire Department has no equipment that can safely insulate personnel from these voltages. If a victim is found to be in contact with electrical equipment, no attempt should be made to remove the victim until the representative from the utility deems it safe.

If rescue is deemed possible, Command shall assign a rescue sector with a 1:1 ration to provide emergency assistance to the personnel in the substation. The team shall be standing by the entrance to enter if needed.

A Sector Officer shall be established at the entrance/exit to control access to the confined space. Sector Personnel shall collect accountability cards and record the assignments and entry times of all personnel entering the substation. A primary function of Sector Personnel is to control the number of personnel and prevent crowding at the entrance to the substation.

If fire or hazardous materials are involved, SCBA shall be worn.

The Fire Chief will respond to all incidents where a substation has been or may be entered. He will act as liaison with the utility company representative. He will consult with the utility company on the safety measures and precautions to be taken in each case. The Fire Chief will assign a Safety Sector Officer to assume these responsibilities from the initial stages of the incident. The Safety Sector Officer and utility company representative shall evaluate the risks and make recommendations to Command. If the Safety Sector Officer judges that an operation is unsafe, the operation shall be suspended.

