## Cal/OSHA Electrical High Voltage

1. **Purpose**

The purpose of this procedure is to provide workers with the information required to perform tasks safely when working on voltages greater than 600v.

1. **Qualified Employees**

* Work on high voltage systems greater then 600v must be done by a qualified and competent electrician. Whenever live work is being done a qualified worker must be present to provide assistance in the event of an incident, except when changing fuses, operating switches or other tasks that don’t involve work on live components.
* Employees working on live high voltage systems must adhere to the minimum clear distances specified in CCR 2940.2. Insulator cradles, strain carriers and link sticks must have clear insulation as long as the insulator string or the minimum distance

1. **Ingress / Egress**

* All work locations shall have sufficient access and be safely accessible. A sufficient amount of space must be maintained around electrical equipment to permit safe work and operation. Work locations must be provided with sufficient illumination for safe work. Before conducting work on high voltage systems adequate safety measures will be taken to guard workers from accidental contact with live equipment.
* When work is being done around overhead power lines a warning sign must be placed in plain view of equipment operators and workers. The sign must read “unlawful to operate this equipment within 10 feet of high-voltage lines of 50,000 volts or less” and be legible from 12 feet. An additional statement in small lettering must be provided on the sign. “For minimum clearances of high-voltage lines in excess of 50,000 volts, see California code of regulations, title 8, article 37, High-voltage electrical safety orders.”

1. **Tools**

* The company shall provide insulated tools rated and tested for the voltage of the systems being worked on. Tools provided will be inspected and tested at regular intervals to insure proper function. Employees must clean and inspect every tool, piece of equipment and safety device each time it is used. Defective tools will be tagged out of operation and must not be used.
* Live line tools-hydraulic tools used near live equipment must use proper rated non-conductive hoses. Employees must adhere to the provisions of section 3556, general industry safety orders, title 8, California code of regulations.
* Pneumatic tools must have non-conductive hoses and a moisture accumulator. Hoses must be kept kink free. Air pressure must be discharged prior to making or breaking connections.
* Conductive ladders, measuring tapes, ropes or other measuring devices must not be used while working near live high voltage equipment.

1. **PPE**

* Glove sleeves and blankets must have clearly legible inspection tags displaying the test date or next test date. Insulated equipment must be properly stored, protected from physical damage and excessive heat sources. Safety devices and safeguards shall be utilized whenever possible. Defective equipment must be tagged out until repair can be done by a qualified worker.
* Rubber gloves must be protected by an outer leather or canvas glove. They must be air and water tested at the beginning of each work period.
* Workers exposed to potential discharge must wear clothing of the following type; acetate, nylon, polyester and rayon. Other types of fabric are permitted to be used if marked and treated with flame retardant.