



Insulate and Isolate Techniques for the Live Line Tool Method on Distribution Lines

The Insulate and Isolate (I&I) Technique for the Live Line Tool Method on Distribution Lines requires an effective use of I&I equipment and procedures to provide the necessary level of safety when performing live line work on energized lines and equipment. Insulating Protective Equipment (IPE) and Insulating Personal Protective Equipment (IPPE) are used to protect the line worker while working on or within 5 feet (including extended reach) of energized lines/equipment. IPE includes rubber gloves and sleeves, whereas IPPE includes blankets, line hose, hoods, plastic covers, etc. The isolation technique is used to physically separate, both mechanically and electrically, the employee from all sources of energy.

- Minimum Approach Distances (M.A.D.) that are set forth by 29 CFR 1910.269 need to be followed.
- All employees using this method will be trained in and familiar with safety related work practices, procedures and other safety requirements that pertain to their respective job assignments.
- Before getting into a working position, the approved and properly rated insulate and isolate for the voltage to be worked shall be used on the energized conductors and/or other conductive parts at a different potential.
- Apply Insulating Protective Equipment (IPE) to prevent accidental/inadvertent contact with any conductive object within your extended reach that could have a difference of potential and would allow current to pass through the body.
- Any time an employee's unprotected hands and/or arms are positioned within the MAD of exposed energized lines or equipment, appropriately rated rubber gloves and sleeves shall be worn, or effective cover shall be applied.
- Approved insulating equipment will be installed in the order of "nearest first" and removed in reverse order.

The benefits of this best practice are that it reduces electrical contact injuries and fatalities and eliminates electrical arc flash injuries for a safer work environment while maintaining the reliability of the electrical system.

Read the complete best practice at: [Insulate and Isolate Techniques for the Live Line Tool Method on Distribution Lines](#)