California State University, Chico
Department of Environmental Health and Safety
400 West 1st Street, Chico, California 95929-0019
Phone: (530) 898-5126 Fax: (530) 898-6511 www.csuchico.edu/ehs

Injury & Illness Prevention Program
Job Safety Analysis

Task: INSTALLATION, ALTERATION, MAINTENANCE, OR REPAIR OF ELECTRICAL BREAKERS AND PANELS

Required PPE:

1. FR Clothing and tools that meet the provisions of NFPA 70E specifications: (Reference Table 1.30.7(C)(10)
2. Gloves (as appropriate for voltage)
3. Eye Protection or Face Shield (as appropriate for voltage)
4. Insulated Mats (as needed)
5. Insulated Tools

Required Training: NFPA 70E – Arc Flash Training Lockout/Tagout Training (LOTO)

TASK	HAZARDS	CONTROLS
Preparing to Access Electrical Panel	Injuries from the Impact of Doors Adjacent to the Panel or from Foot/Cart Traffic	• Post warning signs • Set-up barriers • Use an assistant
	Slips, Trips and Falls	• Clear the area surrounding access to the panel • Clean-up any hazards in the area of the panel
	Shock or Electrocution	• Wear **all** required FR rated clothing, eye/face protection, gloves, eye/face protection, etc • Lay down a non-conductive mat to avoid slippage
Remove the Outer Cover and Opening Dead Front	Foot or Hand Injury from Handling the Cover	• Obtain assistance with removing panel cover • Plan for the handling of the panel cover
	Muscle Strain	• Lift using the legs – use safe lifting techniques
	Shock or Electrocution	• Use all required PPE appropriate for voltage load • Watch the edges of the panel and be sure they do not touch the wires in the panel box • Use insulated mats (as needed)
Accessing and Working on Breaker(s) or Panel	Shock or Electrocution	• Ensure LOTO is completed –pre-test to ensure power has been disconnected
	Arc Flash Injuries including Burns	• Use voltage appropriate PPE: FR clothing, eye/face protection, gloves, and insulated tools
	Injuries to Others	• Use signs, barricades, or cones to mark hazardous area • Ensure LOTO procedures are followed and tags are visible from 5-feet away
Reassembling Panel	All Hazards previously listed, considering tasks are in reverse order	• Use care with panel locks to make sure they do not catch on any wires or other components while being replaced • Use all precautions and all PPE as required for voltage load