

## JOB HAZARD ANALYSIS FORM

### COMPLETE BEFORE BEGINNING WORK

(1) JOB INFORMATION		
Date: <b>2/7/2023</b>	Job # (If Applicable):	Task Name/Description: <b>Electrical Installation, Maintenance, or Repair</b>
Department:		Supervisor:
(2) JOB/TASK STEPS (Most jobs require 5-10 basic steps)		
Basic Job Step	Hazard(s) – (See Sections 3 or EHS Hazard Report)	Correct/Safe Work Practice and Hazard Controls/PPE (See Section 4 or EHS Hazard Report)
Assess the accessibility of the equipment and prepare for work.	None Anticipated	<ul style="list-style-type: none"> <li>Notify affected building occupants of service interruption.</li> <li>Select and inspect tools and PPE appropriate for electrical work. Repair or replace equipment which have potential faults or damaged electrical insulation. Some classes of electrical PPE must be tested regularly to be considered protective. If documentation of timely testing is not available, replace PPE with inspected units.</li> <li>Use an assistant or set up barriers/signage prior to work.</li> </ul>
	Trips/ falls	<ul style="list-style-type: none"> <li>Clear obstacles and walkways prior to accessing the equipment.</li> <li>Lay down a non-conductive mat and or use insulated/non-slip footwear.</li> </ul>
De-energize and remove equipment covers.	Shock, Electrocution, Arc Blast	<ul style="list-style-type: none"> <li>Complete Lock-out/Tag-Out process prior to starting whenever possible. Live work is not approved except where de-energizing equipment would create a greater hazard to life.</li> <li>Watch the edges of the panel and be sure they don't touch the wires in the panel box.</li> <li>Wear appropriately rated PPE for the level of electrical hazard.</li> </ul>
	Sharp object/cuts	<ul style="list-style-type: none"> <li>Work in Teams to ease handling.</li> <li>Wear cut and electrical resistant gloves.</li> <li>Place removed covers/components clear of the work area.</li> </ul>
	Pinch points	
	Struck by (falling swinging object)	
Performing de-energized service.	Overexertion	<ul style="list-style-type: none"> <li>Use proper manual handling techniques. Lift with legs, hold heavy objects close to the body, keep back straight, use lifting aids and/or team lift techniques when necessary.</li> </ul>
	Shock or electrocution	<ul style="list-style-type: none"> <li>Confirm zero energy state using appropriate test equipment.</li> <li>Wear gloves properly insulated for the load of the</li> </ul>

		<ul style="list-style-type: none"> <li>panel.</li> <li>Watch the edges of the panel and be sure they don't touch any components/equipment which may still be energized or carry a residual charge</li> </ul>
	Sharp object/cuts	<ul style="list-style-type: none"> <li>Work in Teams to ease handling.</li> <li>Wear cut and electrical resistant gloves.</li> <li>Place removed covers/components clear of the work area.</li> </ul>
	Pinch points	
	Overexertion	
Performing service while energized	Shock/electrocution	<ul style="list-style-type: none"> <li>Wear appropriately rated PPE for the level of electrical hazard. Including gloves, garments, non-conductive footwear, and face shields.</li> <li>Use insulated tools which are rated for live electric work.</li> <li>Work in teams.</li> </ul>
	Skin burns/Arc Blast	<ul style="list-style-type: none"> <li>Wear protective clothing that is rated for the anticipated level of arc-flash/blast hazard, and a face shield.</li> <li>Position body to side of work area/equipment to minimize risk from arc flash/blast,</li> <li>Ensure non-qualified personnel do not enter the limited approach boundary or hazard area while performing work.</li> </ul>
	Eye burns and impact injuries from debris ejected during arc discharges	<ul style="list-style-type: none"> <li>Wear goggles, appropriately darkened.</li> </ul>
	Sharp object/cuts	<ul style="list-style-type: none"> <li>Work in Teams to ease handling.</li> <li>Wear cut and electrical resistant gloves.</li> <li>Place removed covers/components clear of the work area.</li> </ul>
	Pinch points	
	Overexertion	
Reassemble the equipment	All the hazards and controls for the previous tasks exist in reverse order.	<ul style="list-style-type: none"> <li>Use the planning, engineering, and procedure controls for each of the tasks performed.</li> </ul>
	Shock or fire from fasteners	<ul style="list-style-type: none"> <li>Watch the position and location of the panel fasteners to assure they do not catch on other components while being replaced.</li> </ul>
<b>Required Training:</b> -Electrical safety/LOTO (select appropriate level based on service type) -Hand and power tool safety -Workplace ergonomics (If heavy lifting is anticipated) -Slip, trip, fall -PPE specific training		<b>PPE:</b> -Voltage and Energy specific electrical PPE -Slip resistant, non-conductive footwear -Face shield -Cut resistant, non-conductive gloves



## JOB HAZARD ANALYSIS FORM—worksheets

### (3) JOB/TASK HAZARDS (COMPLETE IN LIEU OF OR ADDITION TO EHS WORKSITE HAZARD REPORT)

Items checked below relate to existing site conditions or work operations/steps.

#### Hazardous Building Materials

- ☐ Asbestos
- ☐ Lead
- ☐ PCB
- ☐ Silica

☐ Caught On/By

☐ Caught Between/In

#### Contact/Exposure

- ☒ Electrical
- ☐ Hazardous Energy
- ☐ Chemical
- ☐ Biological
- ☒ Other

Sharp Objects

#### Falls

- ☒ Same Level
- ☒ Lower Level
- ☐ Ladders
- ☐ Other

☒ Struck By/Against

Equipment Covers/components

#### Environmental/Physical

- ☐ Hazardous Atmospheres
- Confined Space ☐ Non-Permit ☐ Permit
- ☐ Heat
- ☐ Cold
- ☐ Pests/wildlife
- ☐ Weather
- ☒ Overexertion
- ☐ Other

### (4) HAZARD CONTROL MEASURES (COMPLETE IN LIEU OF OR ADDITION TO EHS WORKSITE HAZARD REPORT)

#### A) Task/Hazard Elimination

- ☐ Equipment changes
- ☒ Tool changes (IE reach poles)  
Electrically Insulated tools
- ☒ Remove hazardous items  
Housekeeping before work
- ☐ Work Timing/scheduling
- ☒ Other  
De-energization/LOTO

#### B) Substitution

- ☐ Use lower hazard product
- ☐ Use different form of product
- ☐ Less hazardous energy source
- ☐ Other

#### C) Engineering/Process Controls

- ☐ Physical Barrier
- ☐ Machine Guard
- ☐ Ventilation
- ☐ Machine/Process Enclosure
- ☒ Mechanical Lifting Device
- ☐ Wet Method/Dust Control
- ☐ Chemical Use Controls
- ☐ Process Automation
- ☒ Manual Handling Aids
- ☐ Other

#### D) Administrative Controls

- ☒ See Section 2 for Correct/Safe work practices.
- ☒ Training
- ☒ Other  
Team Lift

#### E) Personal Protective Equipment (PPE)

- ☐ Fall protection
- ☒ Gloves
- ☐ Hard hat
- ☐ Hearing protection
- ☐ Respiratory protection
- ☒ FR Clothing
- ☐ Safety glasses
- ☒ Other  
Electrical protective garments, footwear, gloves, etc.

**NOTE: Confirm mitigation and protective steps with your Supervisor/Safety Representative.**

### (5) COMPLETE FOR WORK AT HEIGHTS

#### Elevation category:

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Roof                 | <input type="checkbox"/> Scaffold       | <input type="checkbox"/> Fixed Equipment |
| <input type="checkbox"/> Theater Rigging Area | <input type="checkbox"/> Lift           | <input type="checkbox"/> Tree Climbing   |
| <input type="checkbox"/> Loading Dock         | <input type="checkbox"/> Fixed Platform | <input type="checkbox"/> Other: _____    |

#### Fall protection to be used (Check all that apply)

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> Full body harness    | <input type="checkbox"/> Fixed length lanyard | <input type="checkbox"/> Exclusion Zones    | <input type="checkbox"/> Monitoring personnel |
| <input type="checkbox"/> Retractable lifeline | <input type="checkbox"/> Anchorage straps     | <input type="checkbox"/> Physical restraint | <input type="checkbox"/> Other                |

Has each employee inspected his or her fall protection equipment? \_\_\_\_\_

Have all employees working at heights completed Fall Protection Training? \_\_\_\_\_

Describe the fall protection system to be used: \_\_\_\_\_

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