

PURPOSE: Review each job task performed by employees to determine where job task hazards exist; providing recommendations for hazard elimination/protection, identifying appropriate personal protective equipment (PPE), and training to inform employees of appropriate safety standards and precautions.

Department: Facilities Operation and Development

Job Title: Facilities Electrical and Electronic Systems









Job Task: Performs tasks that ensure the uninterrupted operations of automated, electrical and electronic systems and equipment.









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REQUIRED PERSONAL PROTECTIVE EQUIPMENT *(choose all that apply for this task. If other, please type in specifics)*









 <p>Body Protection</p> <p>As Required by Job / Task - various</p>	 <p>Eye Protection</p> <p>Other Arc-Rated Face Shield</p>	
 <p>Fall Protection</p> <p>Fall Protection System Required</p>	 <p>Foot Protection</p> <p>EH Rated Safety Shoes</p>	
 <p>Hand Protection</p> <p>Other</p>	 <p>Head Protection</p> <p>As Required by Job / Task - various</p>	
 <p>Hearing Protection</p> <p>As Required by Job / Task - various</p>	 <p>Respiratory Protection</p> <p>As Required by Job / Task - various</p>	

 Task/Step 	 Hazard(s) 	 Control Methods 	 Additional Information 
<i>Break the job into a sequence of steps. Each of the steps should accompany some major task.</i>	<i>Identify the hazard(s) associated with each step. Every possible source of energy must be identified. Look at the entire environment to determine every conceivable hazard.</i>	<i>Decide what actions are necessary to eliminate, control, or minimize hazards that could lead to accidents, injuries, damage to the environment, or illness.</i>	<i>Put any additional information here that should be known by the employee performing the task.</i>
Working around electricity	Electricity	De-energize equipment and work area. Always utilize lock-out/tag-out device. Verify equipment is de-energized. Utilize all PPE.	If equipment must remain on; wear safety glasses and leather gloves and have a spotter with you. Remove standing water.
Equipment Maintenance	Electricity Other	Shut off any power source before working, Utilize lock-out/tag-out Have appropriate PPE depending on job task.	Other includes; electric shock, parts shooting and striking worker, getting caught in equipment, cuts from sharp edges
Working with power tools	Hand/Power Tools Slips, Trips, and Falls	Wear goggles and dust mask if applicable. Keep cords away from work area. Keep tools in good condition. Inspect tools before use.	Cuts, abrasive, electric shock, injury from flying debris, tripping over power cords. Verify that guards are working.
Using hand tools	Hand/Power Tools	Keep tools in good condition. Inspect tools before use. Wear safety glasses. Work away from yourself. Use normal caution required.	
Working on roofs	Other	Utilize fall-arrest systems if applicable. Walk away from the edges. Avoid working on really windy or wet/icy days. Door open.	Other includes; Slipping and falling, high winds. Utilize 2-way radio system.
Using ladders or step-ladders	Ladders Elevated Work	Inspect ladder before use. Use ladder at proper height. Make sure the ladder is assembled, locked and on level ground.	Do not exceed weight limit for ladder. Do not stand on the top or top rung of ladder. Use a spotter if higher than step ladder.
Using scaffolding	Elevated Work Slips, Trips, and Falls	Inspect all equipment before using and make sure it is assembled correctly; wheels are locked. Use safety rails. OSHA 1910.27	Have a safe way to descend. Utilize proper PPE if required. Follow guidelines in OSHA 1910.28 regarding rails, toe-boards, etc.
Working in mechanical rooms	Noise Other	Be aware of odors and evacuate if you smell gas; be aware of your surroundings, walk carefully, hearing protection if needed.	Other includes; Explosions from gas lines; burns from steam, hot water lines; slipping on water or oil; tripping, loud noise.
Working in confined spaces	Confined Space Entry	Before working in confined area, verify that it is safe by monitoring air. Always ventilate area using fan.	Confined Space Permit must be obtained. Competent Person on the outside to monitor safety of occupants. OSHA 1910.149
Working in high-voltage switch gear rooms.	Electricity	Use lock out / tag out procedures to turn off electricity. Check tester on known circuit. Use hot sticks and growlers to verify OFF.	If working on something live, wear insulated gloves. Do not wear keys, rings, watches, or other jewelry.


































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Working in area of pedestrian traffic.	Other	Pedestrians knocking over ladders or lights or bumping into worker; pedestrians getting hit by tools	Always be aware of surroundings.
Working outside in extreme temperatures	Cold/Heat Stress	Wear proper clothing, take frequent breaks, stay hydrated.	
Heavy lifting	Heavy Lifting	Use proper lifting techniques, limit duration of repetitive motion. Always know your weight limit, lift with your legs.	Get help if needed; heavy or awkward.
May work with materials containing asbestos.	Asbestos Exposure	Never disturb materials containing asbestos unless properly trained. Use appropriate exposure control methods and PPE.	Call EHS regarding asbestos concerns.
Working with 600V class switchgear	Electricity	Ensure LOTO procedures have been strictly followed. Ensure the panelboard has been de-energized by using a voltage meter. PPE.	Only a qualified person shall de-energize or re-energize panelboards. Refer to NFPA 70E, Table 130.7(C)(9) to determine PPE.
Working with other 600V class equipment (277V through 600V nominal).	Electricity	Ensure LOTO procedures have been strictly followed. Ensure the panelboard has been de-energized by using a voltage meter. PPE.	Only a qualified person shall de-energize or re-energize panelboards. Refer to NFPA 70E, Table 130.7(C)(9) to determine PPE.
Working with NEMA E2 motor starters (2.3kV through 7.2kV).	Electricity	Ensure LOTO procedures have been strictly followed. Ensure the panelboard has been de-energized by using a voltage meter. PPE.	Only a qualified person shall de-energize or re-energize panelboards. Refer to NFPA 70E, Table 130.7(C)(9) to determine PPE.
Working with metal clad switchgear (1kV through 38kV).	Electricity	Ensure LOTO procedures have been strictly followed. Ensure the panelboard has been de-energized by using a voltage meter. PPE.	Only a qualified person shall de-energize or re-energize panelboards. Refer to NFPA 70E, Table 130.7(C)(9) to determine PPE.
Working with arc-resistant switchgear, Type 1 or 2.	Electricity	Ensure LOTO procedures have been strictly followed. Ensure the panelboard has been de-energized by using a voltage meter. PPE.	Only a qualified person shall de-energize or re-energize panelboards. Refer to NFPA 70E, Table 130.7(C)(9) to determine PPE.
Working with/around rotating equipment.	Other	Secure or remove loose clothing, jewelry or anything else that could be entangled in the rotating wheel.	Watch for pinch points.

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Working in awkward positions and locations.	Other	Avoid prolonged awkward positions; use proper lifting techniques. Ask for help when needed.	Use stretching exercises before work starts. Take frequent short breaks when possible.
Working in poorly lit areas.	Slips, Trips, and Falls	Use a pedestal light, hand-held light, or a head lamp (miners lamp) to gain visibility.	
Working on or around extremely hot equipment/machinery.	Heat	Drink plenty of fluids and take breaks as needed in cool areas. Ensure machine guards are in place. Appropriate PPE.	
Fall protection.	Elevated Work	Use of a guardrail system, warning line system or personal fall required.	Employees on a work surface with an unprotected side/edge which is 6 feet or more above a surface shall be protected
Rigging.	Other	Inspect prior to use. Defective rigging, or rigging showing signs of excessive wear, shall be removed from service; red tagged.	Other includes; Dismemberment, bruising, broken bones, pinching, blisters and struck by/caught between.
Working with/in hazardous agents and environments.	Other	Use approved and calibrated testing devices prior to starting work. Refer to SDS.	Other includes; Asphyxiation, respiratory complications and chemical burns.
Using generators.	Electricity Other	Ensure the generator is properly grounded; do not use in an enclosed area. Ensure exhaust fumes are vented away; PPE	Always read and follow all manufactures labels and markings on the generator prior to use. Inspect the generator prior to use.

REQUIRED TRAINING COURSES *(choose all that apply for this task. If other, please type in specifics)*

 Building Emergency Action Plan	 Heat and Cold Stress	
 Confined Space Entry	 Lead Safety Awareness	
 Crane, Sling, and Hoist Safety	 Legionella Awareness	
 Electrical Safety/Arc Flash Awareness	 Lockout/Tagout	
 Elevated Work	 Personal Protective Equipment (PPE)	
 Fall Protection	 Respiratory Protection	
 Filtering Facepiece Respirator Training	 Shop Safety	
 Fire Extinguisher	 Silica Dust Safety	
 Hand and Power Tool Safety	 OSHA Class III Asbestos Course	
 Hazard Communication		
 Hearing Conservation		

I have read and understand the contents of the JHA and the controls required to mitigate the risks from the identified hazards.

Employee Name: _____

Supervisor: _____

Date: _____

Date: _____