High Volt Electrician Job Series Matrix

Job Series: Electrician High Voltage **Job Family: Physical Environment** Job Series Code: X24 Services

Job Series Summary:

The Electrician Job Family includes positions in which the major duties involve the installation, maintenance, and repair of electrical systems and equipment and if permitted, new construction and remodels. Employees in this job family perform journey level work concerned with the proper technical installation, operation and maintenance of electrical systems in university buildings and street lighting systems, communications systems, etc. Assignments may involve work on overhead lines, high voltage cables and other situations with some hazard.

There are two Job Series in the Electrician Job Family. 1) Electrician Job Series includes the Electrician Maintenance, Electrician Specialist and Electrician Lead jobs. 2) Electrician High Voltage Job Series includes the Electrician Specialist High Voltage and the Electrician Lead High Voltage.

These levels are differentiated by the specific type of work performed and the degree of independence with which it is carried out. The High Voltage Electrician and High Voltage Electrician Lead are only found in the utility delivery system environment. The Electrician and Electrician High Voltage job series have separate career paths and require different experiences and skills.	
Job Title: Electrician Specialist High Voltage	Job Title: Electrician Lead High Voltage
Job Classification Code: 8375 Pay Range: A43	Job Classification Code: 8376 Pay Range: A45
Effective/Revision Date: 10/25/2024	Effective/Revision Date: 10/25/2024
Job Responsibilities	Job Responsibilities
Perform journey level and high voltage electrician work involved with the installation, maintenance, monitoring, operation and repair of the electrical substations, electrical distribution systems, utility control and metering with minimal technical assistance. Receive assignments in the form of work orders, blueprints, sketches, verbal instructions and schedules their own work, determining work priorities. Diagnose problems independently and determine the appropriate method and procedure needed to complete the work. Working with the Lead and co-workers, ensures that the work specifications conform to shop standards. May work with the Lead person to order materials needed for work.	 Lead and direct two or more Electrician Specialist – High Voltage in addition to performing the duties specified for the Electrician Specialist – High Voltage classification. Employees at this level do not have supervisory authority over other employees and are not expected to exercise independent judgment on final decisions regarding quality or quantity of work produced by such employees, or personnel actions such as hiring, promotion, discharge or disciplinary measures.
Characteristic Duties	Characteristic Duties
The duties listed under this section are designed to provide a representative sampling of key tasks and/or responsibilities associated with the job. They are not intended to be a complete list of all the duties performed by employees in the classification.	The duties listed under this section are designed to provide a representative sampling of key tasks and/or responsibilities associated with the job. They are not intended to be a complete list of all the duties performed by employees in the classification.
Work in areas of controlled access such as substations and confined spaces not open to unqualified individuals.	Assign and explain tasks to workers based on instructions and specifications received from supervisor Page 25 Work for conformance with appeiring times.
 Work on high voltage power distribution systems 600 Volts AC and above. 	Inspect work for conformance with specifications.
. Work on low voltage (lose than 600 V) sirguite as pooded	Train employees to meet quality and quantity standards.
 Work on low voltage (less than 600 V) circuits as needed. 	 Advise supervisor of work progress.

- Splice and terminate high voltage cables using approved methods.
- Install, test, calibrate and repair all types of revenue meters, instruments and associated electrical equipment.
- Perform switching and maintenance in substations, switchyards, pad-mounted equipment and in underground vaults and may act as Person in Charge of such operations as directed.
- Respond to power outages which may include response

- Record information on the work performed by others, maintain inventory and other appropriate records.
- May perform any of the duties described in the Electrician Specialist High Voltage specification or other duties as assigned.
- Promote adherence to safety rules.

timely and accurately. **High Volt Electrician Job Series Matrix** Install new equipment, including conduit, wire, cable, pull boxes, meters, transformers, etc., for repairs and alterations in high voltage systems. Work with contractors and discuss potential working and operational hazards. May troubleshoot, monitor, repair, maintain, configure and calibrate computer-based Supervisory Control and Data Acquisition (SCADA) systems, transducers, input devices, communication equipment and data transmission equipment May participate in developing, updating and revising Standard Operating Procedures, Work Planning and Control or other documentation May coordinate and support work of outside vendors and contractors May monitor work of contractors, ensuring safety regulations are being followed. Participate in planning and coordination of power shutdowns for maintenance and repair of high voltage systems; follows University/department procedures for scheduling. May oversee the work of an apprentice. Minimum Education and Experience Required Minimum Education and Experience Required · 4 years of relevant experience with electrical equipment 600 AC · 4 years of relevant experience with high voltage equipment (600 AC Volts and above) and experience with low to medium Volts and above in an operations environment. voltage equipment and repairs. · Journey level knowledge equivalent to four years completion in a recognized High Voltage Electrician apprentice program. · Journey level knowledge equivalent to four years completion in a recognized High Voltage Electrician apprentice program. Minimum Knowledge, Skills and Abilities Required Minimum Knowledge, Skills and Abilities Required

during off-hours on a call back basis.

Troubleshoot and repair faulty equipment.

Test, repair and troubleshoot electrical circuits and controls.

Enter labor hours and complete work orders with details in a computerized maintenance management system (CMMS)

- Demonstrated knowledge of high voltage electrical theory and practices sufficient to plan work independently on power distribution equipment.
- Understanding of, and willingness to comply with, electrical and work safety procedures including National Electrical Code and CAL-OSHA Standards.
- Demonstrated ability to handle tools of the trade (amprobes, amp meters, recording devices, etc.).
- Demonstrated ability to read single line diagrams, schematics, wiring, installation diagrams, etc.
- Demonstrated ability to diagnose electrical problems and then make repairs on equipment.
- Demonstrated ability to perform new installations of high voltage equipment and electrical systems.

- · Demonstrated leadership skills.
- Demonstrated ability to solve complex problems.
- Demonstrated ability to affect good working relationships with other employees.
- Demonstrated ability to follow written and/or oral instructions and communicate those instructions to others.
- Understanding of, and willingness to comply with, and significant experience applying electrical and work safety procedures including National Electrical Code and CAL-OSHA Standards (and if working at SLAC DOE standards).
- Must possess the same knowledge, skills and abilities of the High Voltage Specialist.
- Demonstrated ability to learn and apply the University's commitment to a respectful workplace including, but not limited to, Affirmative Action, diversity and a workplace free of sexual harassment as it applies to their work group.

Certificates and Licenses Required

- Valid California Non-commercial Class license, a good driving record and the ability to operate standard and automatic transmission vehicles and may operate a high lift truck.
- Must have and maintain certification in CPR and First Aid training.
- \cdot Must be certified to NFPA-70E, and maintain status as a Qualified Electrical Worker
- · California State Electrical Certification, preferred

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Physical Requirements

- Ability to obtain and maintain a California Non-commercial Class license.
- · Ability to work on or use boom lifts, scissor lifts, cranes and forklifts to perform duties.
- · Constantly stand/walk, lift up to 10 lbs.
- · Frequently grasp forcefully, perform light/fine grasping, lift up to 20 lbs.
- · Occasionally perform seated work, kneel/crawl, climb, twist/bend/stoop/squat, reach, lift, pull, work above shoulders, operate hand and/or foot controls
- Perform-desk based computer tasks, use a telephone and computer, write by hand, sort/file soft and hard files or parts, scrub, sweep and lift 21–50 pounds.
- Ability to wear and work in Personal Protective Equipment (PPE), including such items as gloves, foot and eye protection, protective hearing devices (earplugs, muffs), hard hats, respirators and full body suits.

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Working Conditions

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- May be required to work overtime, evenings and weekends, including Holidays, sometimes in inclement weather conditions.
- May be required to work in confined spaces and work at elevated surfaces at heights over ten feet.
- May be exposed to high-voltage electricity, radiation or electromagnetic fields, lasers, noise>80db TWA, allergens, biohazards, chemicals, asbestos, hot and cold temperature extremes
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Work Standards

- When conducting university business, must comply with the California Vehicle Code and Stanford University driving requirements.
- Interpersonal Skills: Demonstrates the ability to work well with Stanford colleagues and clients and with external organizations.
- Promote Culture of Safety: Demonstrates commitment to personal responsibility and value for safety; communicates safety concerns; uses and promotes safe behaviors based on training and lessons learned.
- Subject to and expected to comply with all applicable University
 policies and procedures, including but not limited to the
 personnel policies and other policies found in the University's
 Administrative Guide, http://adminguide.stanford.edu/
 and the appropriate collective bargaining agreement at
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