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| Employee Name: |  | Fresno State ID # |  |
| Classification: | Supervising Electrician | Working Title: | Supervising Electrician |
| Prepared By (MPP/Chair): | Mark Sine | Department: | Facilities Management |
| Bargaining Unit: | 06 | FLSA Status: | Non–Exempt | Date Prepared: | Sept 2024 |

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| **POSITION DESCRIPTION** |

**Overview:**

Under the general direction of the Associate Director for Energy Services, the Supervising Electrician primarily is responsible for supervising and working with a crew of skilled journey-level electricians and their semi-skilled assistants in the performance of general electrical maintenance work outlined in the series overview.

Major Duties of the Job Include:

* Supervisory & Coordination 70%
* Capital Project Support 20%
* Electrician Duties 10%

**Supervisory & Coordination:**

* Provide overall technical leadership of the Electric Shop.
* Prioritize and coordinate the work of multiple crews or projects.
* Assign work to qualified crew members.
* Determine necessary materials, supplies, equipment and staffing to meet work orders and preventive maintenance schedule.
* Provide work and safety instructions.
* Provide on-the-job training and instructions to less skilled workers in trade and safety practices.
* Collaborate and coordinate work with other departments and trades workers.
* Provide written input on performance evaluations.
* Prepare and issue written or oral work directives.
* Monitor work in progress. May be asked to monitor contractor performance and work progress.
* Inspect completed work to ensure it is in compliance with specifications, special instructions and sound trade practices.
* Use computerized maintenance management system to track/close work completed, labor, work note entries, schedule upcoming work and PM’s.
* Maintain computerized maintenance management systems, including accounting for labor, materials and purchasing, as well as prepare reports.

**Capital Project Support:**

* Collaborate with engineering and design departments.
* Interpret complicated plans and drawings.
* Coordinating work schedules and work assignments to meet the overall construction/modification objectives.
* Ensuring the availability of required materials and equipment.
* Prepare cost and time estimates.
* Provide a high level of inspection to ensure work is in compliance with specifications, special instructions, sound trade practices and that appropriate building and safety codes are met.
* May design minor tenant improvements and coordinate and supervise the work of related trades workers on specific projects.

**Perform Electrician Duties:**

* Performs repair, and electrical construction duties, such as repair and/or installing electrical distribution of building, street, and path lighting including all associated circuits, and circuit appliances, electrical conduit, electrical panels, wire molding and other wiring devices such as circuit breakers, safety switches, lighting contactors, motor controllers, etc. with voltages up to and including 12KV. This involves the proper use of diagnostic instruments such as infrared scanners, megger, Volt-Ohm meter, ammeter, circuit tracers, and other voltage potential detection devices. Work involves reference to and uses of manufacturer's service manuals and specifications.
* Performs circuit load calculations; voltage drop and conduit fill calculations. Understanding of, and willingness to comply with, electrical and work procedures and requirements including National Electrical Code & CAL-OSHA Standards.
* Performs estimates and project support including plan review.
* Performs preventive maintenance and repair of electrical motors, controls, motor control centers, building lighting systems, electrical panels, circuit breakers, fusible disconnects, emergency generators, building elevators, fire alarm systems, rotating machinery, street and path lighting, control relays, card access and door operators, standby lighting systems and other equipment as assigned.
* Performs troubleshooting by diagnosing electrical shorts, open circuits, low and high resistance circuits. This will be performed by oral or written instructions using architectural drawings, sketches and/or electrical blueprints and material lists.
* Must maintain knowledge of and complete training in maintaining and troubleshooting a wide variety of electrical specialties such as Elevators, VFD's, Fire Alarms, Card Access and Door Operators, Generators and Photovoltaic systems.
* Perform preventive maintenance and assist in repairs of 12KV distribution systems consisting of 12KV and AC circuits, co-generation systems.
* Performs safety inspections and routine maintenance on tools and equipment used. Attends safety and training classes and performs job related tasks in a safe manner. Understanding of, and willingness to comply with, electrical safety work procedures and requirements from NFPA 70E, IEEE, NETA and ANSI. Follows all product and university specific safety procedures when using tools and PPE selection.
* Work may involve exposure to hazardous materials or conditions.
* Writes and maintains a daily timesheet.
* Respond to routine maintenance and service requests.
* Responds to campus electrical outage callouts after normal hours, weekends and holidays.
* Maintains a professional-like attitude at all times while on duty.

**Secondary duties of the job include:**

* Maintain and service tools and equipment used in the performance of duties.
* Maintain a safe and clean work environment.
* Provide instruction to unskilled and semi-skilled assistants.
* Assist other electricians or tradespersons on campus systems.
* Maintain regular attendance.
* Perform other job-related duties and special projects as assigned.
* Attend training and maintain skill currency as appropriate to safely and effectively complete assignments.
* Adhere to the Facilities Management Trades Expectations.

Supervisory Responsibility:

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| Who Supervises/leads this Position: | Associate Director of Energy Services  |
| Who is Responsible for completing the Performance Appraisal: | Associate Director of Energy Services |
| What other classifications does this position supervise or provide lead, work oversight: | None currently |

**Minimum Requirements: Knowledge, Skills, and Abilities:**

**Knowledge:**

* Must possess a knowledge of effective supervisory practices and techniques and a working knowledge of job design and work sequencing related to construction projects.
* Requires thorough knowledge of electrical theory and the methods, materials, tools, and equipment used in the electrical trade for the installation, maintenance and repair of electrical apparatuses, equipment and systems.
* Work requires thorough knowledge of electrical theory, and the methods, materials, tools and equipment used in the electrical trade for the installation, maintenance and repair of electrical apparatuses, equipment and systems.
* Thorough knowledge of applicable state and federal codes and regulations pertaining to the electrical trade, including the National Electric Code and Electrical Safety Orders of the Division of Industrial Safety of the State of California.
* Knowledge of the NEC, CEC, OSHA Safety Regulations & NFPA 70E procedures.
* Knowledge of electrical theory, AC and DC, OHMS law, series and parallel circuits, inductance capacitance, magnetism, power factor, transformers, relays, and other electrical devices.
* Knowledge of the use of electrical service manuals.

**Abilities:**

* Must be able to lead, instruct, plan, and direct the work of skilled crafts workers and their semi-skilled assistants.
* Determine and coordinate staffing, material and equipment needs for multiple jobs and projects.
* Ensure accuracy and maintenance of assigned record-keeping systems.
* Incumbents also must be a skilled Electrician.
* Must be able to assemble, install, maintain, and repair electrical apparatuses.
* Ability to maintain, trouble shoot building electrical, systems, including, lighting systems, power systems, power control systems, power control circuits and low voltage circuitry.
* Maintain, troubleshoot and repair, electrical wiring, electrical panels, and other electrical devices such as lighting fixtures and circuits, standby generator systems, standby lighting systems, circuit breakers, control relays, etc.
* Ability to bend conduit and install complete conduit systems
* Operate all applicable tools and equipment necessary to perform skilled electrical work.
* Layout work from architectural drawings, sketches, creates blueprints and materials list and place orders for materials.
* Read, interpret, and work from blueprints, plans, drawings, and specifications.
* Make rough sketches.
* Estimate the cost, time, and materials of electrical work.
* Maintain records and retrieve data related to work performed using manual and computerized recordkeeping.
* Respond appropriately to emergency situations.
* Read and write at a level appropriate to the position and perform arithmetic calculations.

**Education and Experience:**

* The abilities of the Supervising Electrician normally would be acquired through five or more years of any combination of progressively responsible training and experience which demonstrates achievement of journey level skills equivalent to that acquired through completion of a standard electrician’s apprenticeship program, including one to two years in a lead/supervisory capacity.
* Experience and/or skills in using applicable circuit testing equipment, diagnostic instruments, infrared scanners.
* Possession of a valid, current class "C" California Driver's License (DMV report copy needed at time of interview) and a demonstrated good driving record:

**Specialized Skills:**

* Ability to maintain records, retrieve data, and prepare standard reports using manual and/or computerized record-keeping systems.
* Demonstrated ability to read, interpret, and work from blueprints, plans, drawings and specifications, and make rough sketches.
* Ability to estimate cost, time, and materials of mechanical work.
* Ability to provide instruction to unskilled and semi-skilled assistants.
* Analyze and respond appropriately to emergency situations.
* Ability to read, write, and perform arithmetic functions at a level appropriate to the position.
* Ability to interact and communicate in an effective and dependable manner, as well as establish and maintain cooperative working relationships with clientele such as students, staff, faculty, and co-workers.
* Demonstrated ability to use tact and diplomacy to effectively handle a broad range of high level and sensitive interpersonal situations with diverse personalities, and to respond appropriately to conflicts and problems.
* Excellent organizational and time management skills with the ability to set own priorities to coordinate multiple assignments with fluctuating and time-sensitive deadlines.
* Ability to demonstrate professionalism in entering occupied areas including student residential halls, faculty, and staff offices and other university space.
* Must be able to use judgement and discretion in determining the methods and priorities of work orders.
* Excellent organizational and time management skills with the ability to set own priorities to coordinate multiple assignments with fluctuating and time-sensitive deadlines.
* Must be able to work independently, as well as a member in a team environment.

**Preferred Skills:**

* Ability to operationalize and incorporate the concepts of sustainability into daily work efforts.

**Special Conditions**:

* Work may involve exposure to hazardous materials or conditions.
* Ability to wear respiratory protection. A Cal/OSHA mandated medical evaluation is required prior to the use of a respirator.
* This position may require the ability to obtain AHERA Supervisor certification for asbestos related work and Cal/OSHA Lead training.
* Must be able to successfully complete the Defensive Driver Training Program provided by the State of California for CSU campuses and pass the course exam.
* Must be able to work in high places and perform heaving lifting/moving up to 75 pounds including lifting heavy electric motors.
* Ability to work around large and noisy equipment with many moving parts.
* Ability to work at heights, including bucket trucks or other high lift equipment.
* Ability to work on electrical systems requiring thorough knowledge of the National Electric Code, NFPA 70E, and other electrical safety procedures.
* Must be able to work various shifts (as applicable), including weekends, and have a willingness to switch shifts to meet operational needs. Must be able to work overtime, occasional holidays, and adjust working hours to meet special jobs. May be called back periodically to perform work as needed on an emergency basis.
* Must be able to successfully pass a pre-employment background/fingerprint check.
* Must be willing to travel and attend training programs off-site for occasional professional development.
* The person holding this position is considered a 'mandated reporter' under the California Child Abuse and Neglect Reporting Act and is required to comply with the requirements set forth in CSU Executive Order 1083 as a condition of employment.
* This position will have a duty to report to the Campus Title IX Officer information pertaining to victims of sex discrimination, sexual harassment, sexual misconduct, dating/domestic violence, and stalking as required by CSU Executive Order 1095.
* This position classification has been defined as “Non-exempt” and is subject to overtime provisions of the Fair Labor Standards Act (FLSA).
* Possession of a valid driver’s license or the ability to obtain it by date of hire.

**SPECIAL CONDITIONS OF EMPLOYMENT AND POSITION DESIGNATIONS:**

This position will have a duty to report to the Campus Title IX Officer information pertaining to victims of sex discrimination, sexual harassment, sexual misconduct, dating/domestic violence, and stalking as required by [CSU](http://www.calstate.edu/eo/EO-1095-rev-6-23-15.html) [Executive Order 1095.](http://www.calstate.edu/eo/EO-1095-rev-6-23-15.html)

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| Employee Name: |  | Position: | Supervising Electrician |
| Department: | Facilities Management | Date Prepared: | September 2024 |

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| **WORKING ENVIRONMENT** |

Check the appropriate box which most accurately describes the extent of the specific activity performed by the employee on a daily basis. If the activity is performed less than one (1) hour each day, check the N/A box.

**PHYSICAL EFFORT**

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| --- | --- | --- | --- | --- |
|  | Number of hours/day |  |  | Number of hours/day |
|  | N/A | 1-2 | 3-4 | 5-6 | 7+ |  |  | N/A | 1-2 | 3-4 | 5-6 | 7+ |
| 1. Sitting |[ ] [ ] [x] [ ] [ ]   | 12. Lifting or carrying |[ ] [ ] [ ] [ ] [x]
| 2. Standing |[ ] [ ] [ ] [ ] [x]   | A. 10 lbs. or less |[ ] [ ] [ ] [ ] [x]
| 3. Walking |[ ] [ ] [ ] [x] [ ]   | B. 11 to 25 lbs. |[ ] [ ] [ ] [x] [ ]
| 4. Bending Over |[ ] [ ] [ ] [x] [ ]   | C. 26 to 50 lbs. |[ ] [ ] [ ] [x] [ ]
| 5. Crawling |[ ] [x] [ ] [ ] [ ]   | D. 51 to 75 lbs. |[ ] [ ] [x] [ ] [ ]
| 6. Climbing |[ ] [ ] [ ] [ ] [x]   | E. 76 to 100 lbs. |[ ] [x] [ ] [ ] [ ]
| 7. Reaching overhead |[ ] [ ] [ ] [ ] [x]   | F. Over 100 lbs. |[x] [ ] [ ] [ ] [ ]
| 8. Crouching |[ ] [ ] [ ] [ ] [x]   | 13. Repetitive use of hands/arms |[ ] [ ] [ ] [ ] [x]
| 9. Kneeling |[ ] [ ] [ ] [ ] [x]   | 14. Repetitive use of legs |[ ] [ ] [ ] [ ] [x]
| 10. Balancing |[ ] [x] [ ] [ ] [ ]   | 15. Eye/hand coordination |[ ] [ ] [ ] [ ] [x]
| 11. Pushing or pulling |[ ] [x] [ ] [ ] [ ]

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|  | Yes | No |
| 16. Driving cars, trucks, forklifts and other equipment |[x] [ ]
| 17. Being around scientific equipment and machinery |[x] [ ]
| 18. Walking on uneven ground |[x] [ ]

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| **MENTAL EFFORT** |  | **ENVIRONMENTAL FACTORS** |
|  | Number of hours/day |  |  | Number of hours/day |
|  | N/A | 1-2 | 3-4 | 5-6 | 7+ |  |  | N/A | 1-2 | 3-4 | 5-6 | 7+ |
| 1. Directing Others |[ ] [ ] [ ] [ ] [x]   | 1. Inside |[ ] [ ] [ ] [ ] [x]
| 2. Writing |[ ] [ ] [x] [ ] [ ]   | 2. Outside |[ ] [ ] [ ] [ ] [x]
| 3. Using math/calculations |[ ] [ ] [x] [ ] [ ]   | 3. Humid |[ ] [ ] [ ] [ ] [x]
| 4. Talking |[ ] [ ] [ ] [ ] [x]   | 4. Hazards |[ ] [ ] [ ] [ ] [x]
| 5. Working at various tempos |[ ] [ ] [ ] [ ] [x]   | 5. High places |[ ] [ ] [ ] [ ] [x]
| 6. Concentrating amid distractions |[ ] [ ] [ ] [ ] [x]   | 6. Hot |[ ] [ ] [ ] [ ] [x]
| 7. Remembering names |[ ] [ ] [ ] [ ] [x]   | 7. Cold |[ ] [ ] [ ] [ ] [x]
| 8. Remembering details |[ ] [ ] [ ] [ ] [x]   | 8. Dry |[ ] [ ] [ ] [ ] [x]
| 9. Making decisions |[ ] [ ] [ ] [ ] [x]   | 9. Wet |[ ] [ ] [ ] [ ] [x]
| 10. Working rapidly |[ ] [ ] [ ] [ ] [x]   | 10. Change of temp |[ ] [ ] [ ] [ ] [x]
| 11. Examining/observing details |[ ] [ ] [ ] [ ] [x]   | 11. Dirty |[ ] [ ] [ ] [ ] [x]
| 12. Discriminating colors |[ ] [ ] [ ] [ ] [x]   | 12. Dusty |[ ] [ ] [ ] [ ] [x]
|  |  |  |  |  |  |  | 13. Odors |[ ] [ ] [ ] [ ] [x]
|  |  |  |  |  |  |  | 14. Noisy |[ ] [ ] [ ] [ ] [x]
|  |  |  |  |  |  |  | 15. Working With others |[ ] [ ] [ ] [ ] [x]
|  |  |  |  |  |  |  | 16. Working around others |[ ] [ ] [ ] [ ] [x]
|  |  |  |  |  |  |  | 17. Working alone |[ ] [ ] [ ] [ ] [x]