



ELECTRICIAN 3

4009

GENERAL DESCRIPTION OF CLASS

The ELECTRICIAN 3 does journey level electrical work to design, install, maintain, repair and replace any type of electrical equipment or systems owned or controlled by the state. The Electrician 3 also directs the work of lower level employees and assists them in the completion of electrical work.

DISTINGUISHING FEATURES

This class is the third level of a three level series. Employees independently plan and coordinate the efforts of lower level employees and collaborate with other senior level trades' people to develop project plans. The employee is responsible for the technical or professional correctness of their methods and techniques. They develop and apply new methods to solve problems where guidelines from the supervisor or other published sources are largely inapplicable.

The Electrician 3 level is distinguished from the lower levels by the responsibility to design, direct and supervise the installation, maintenance, repair and replacement of any type of electrical equipment or systems or, new electrical systems of any type. Electrician 3 positions sign off on work completed by lower level electricians. Electrician 3 positions have the sole responsibility for obtaining electrical permits.

DUTIES AND RESPONSIBILITIES

The listed duties are characteristic of the type and level of work associated with this classification. Individual position may do all or some combination of the duties or other related duties.

1. Work Coordination

Estimate extent of design, alteration, maintenance or repairs needed to buildings and building facilities' electrical equipment and systems. Prioritize tasks for each phase of work based on skills of trades' people in the unit. Plan, assign, and review the work of lower level employees in the unit. Requisition materials and supplies or purchase supplies up to authorized spending limit. Maintain data on costs and timeliness of work. Act as liaison with others involved in projects such as State inspectors, representatives of local power companies, city or county road repair crews and other trades people. Coordinate work with trades' people to prevent delays or inconvenience to users of agency's services. Evaluate employee performance and recommend appropriate performance appraisal to managers.

2. Administrative Duties

Adjust work assignments and schedules to maintain staffing levels and respond to fluctuating workloads. Assess training needs of staff and arrange for, or provide, appropriate instruction. Provide initial orientation to new employees. Help with developing policy, procedures, and plans for matters such as the scheduling and extent of routine preventive maintenance. Monitor and account for unit's inventory of equipment, tools, and supplies. Conduct physical inventory of supplies and equipment. Determine the need for outside contractors and make recommendations to supervisor or manager. Formulate specifications for job. Review and recommend acceptance of bids to supervisor or manager. Monitor work of contractor; write weekly or monthly status reports of unit activities including progress of ongoing projects. Sign for permits as a representative of the State of Oregon.

3. Electrical Installation, Maintenance and Repair.

Design, install, maintain, repair and replace any type of electrical equipment or system such as the repair electric motors, equipment, and instruments such as pumps, clocks, lamps, x-ray machines, stoves, timers, air conditioners, fans, metering devices, elevators, power tools, and refrigerators. Replace worn out parts.

Establish priority of repairs. Diagnose problems utilizing appropriate tools and test equipment. Estimate cost of jobs. Contact vendors to order materials to complete jobs. Implement a preventive maintenance schedule and perform preventive maintenance such as conducting routine inspections, cleaning and servicing, and making adjustments and minor repairs to prevent malfunction and prolong the life of equipment, systems and structures. Troubleshoot, diagnose, maintain and repair circuit breakers and transformers, emergency generators, high voltage primary power lines, heating, ventilation, and air conditioning systems, fire alarm systems, electric motors, and lighting maintenance. Install or remove and reinstall wiring, computer cables, power panels, circuit breakers, lighting, switches and receptacles in accordance with code requirements. Calculate electrical load and design new circuits based on the load. Gain access to components and systems. Update blueprints.

4. Miscellaneous

Drive trucks and deliver supplies. Operate a variety of equipment. Read and work from blueprints, shop drawings, sketches and maintenance and operation manuals as needed to complete assigned tasks.

The duties listed below are for positions that work with adult or youth inmate workers:

Some employees coordinate work flow and assign work to adult or youth inmate workers. Employees direct inmates to follow rules, policies, procedures and security guidelines; instruct and train inmates on work techniques and procedures, and in safe and efficient operations of tools and equipment. Employees evaluate inmate work performance; search inmates and area for contraband; verify and sign inmate time cards; monitor work area for cleanliness and order; and direct inmates in cleaning methods.

RELATIONSHIPS WITH OTHERS

Employees in this class have regular, in-person contact with agency staff, skilled trades' workers, vendors and contractors. Employees may direct, instruct and coordinate inmate work crews.

SUPERVISION RECEIVED

Employees in this class receive minimal direction from a supervisor or manager. Employees in this class independently plan and coordinate the efforts of lower level employees and collaborate with other senior level trades people to develop project plans. The employee is responsible for the technical and professional correctness of their methods and techniques. They develop and apply new methods to solve problems where guidelines from the supervisor or other published sources are largely inapplicable.

KNOWLEDGE AND SKILLS (KS)**Extensive knowledge of:**

Methods and principles of the installation, repair and maintenance of electrical systems.
Environmental and safety hazards and precautions of electrical trade and materials.
Methods and principles of the installation, repair and maintenance of electrical systems.
State and local codes related to electrical work.
Estimating time and materials to complete electrical work.
Electrical design and layout.

Skill to:

Apply electrical codes, blue prints, shop drawings, sketches and maintenance and operation manuals to electrical system installation and repair.
Design and plan electrical installation and maintenance based on job specifications and local codes.
Operate and maintain a variety of hand, power and pneumatic tools related to electrical work.
Do journey electrical tasks.
Evaluate electrical information against a set of standards and verify that it is correct.
Identify the nature of electrical problems.
Talk to others to effectively convey information.
Plan, organize and control the use of resources to achieve department goals and objectives.
Coordinate the work of electrical trades' people.
Read and interpret blueprints, plans and drawings.
Instruct others in the safe operation of tools, new technology, use of equipment, electrical principles, and new electrical codes.
Motivate, develop and direct people as they work, identifying the best people for the task at hand.
Manage one's own time and the time of others.
Give guidance and direction to others including setting performance standards and monitoring outcomes.
Identify the developmental needs of others and coach or otherwise help others to improve their knowledge or skills.

NOTE: The KNOWLEDGE and SKILLS are required for initial consideration. Some duties performed by positions in this class may require different KS's. No attempt is made to describe every KS required for **all** positions in this class. Additional KS requirements will be explained on the recruiting announcement.

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Revised

STATE OF OREGON
Dept. of Administrative Services
Human Resource Services Division