

## ELECTRICIAN II

### PURPOSE AND NATURE OF WORK

This is skilled electrical work involved in the analysis of complex electrical systems. Work also involves routine electrical work at or below the journeyman level. Incumbents work with high voltage and around other hazardous conditions. They are also subject to working overtime or being on 24-hour call when necessary. Close or general supervision is exercised over subordinates on occasion. Direction is received from a supervisor.

The work of this class differs from that of Electrician I primarily by the assignment of tasks requiring greater skill. This class may be used for training employees for the more advanced work performed by Electrician III. However, not all positions assigned to this class are trainee positions.

**ILLUSTRATIVE EXAMPLES OF WORK** (Note: These examples are intended only to illustrate the various types of work performed by incumbents in this class. All of the duties performed by any one incumbent may not be listed, nor does any incumbent necessarily perform all of these duties.)

Assists in the maintenance of control centers at both electric plants using schematics and test equipment to locate problems; performs proper repairs on control equipment. Inspects, locates problems, and maintains electrical control systems such as boiler burner management system, turbine zero speed, and turning gear electrical controls and alarm systems. Renders technical assistance to superiors on additions, modifications, or substitutions of electrical devices. Participates in the maintenance of generators and generator excitation equipment; occasionally directs subordinate personnel helping in this work. Performs periodic vibration analysis and records the information for all rotating equipment. Keeps appropriate records on equipment. Performs complex electrical work at the Water and Wastewater plants. Repairs and maintains all electrical equipment, lights, controls, etc. on the water towers, electric plant towers, and other elevated structures as required. Tests and connects transformers, breakers, and related equipment at substations. Tests oil circuit breakers and transformers; filters or replaces oil; and cleans tanks and contacts. Makes specific gravity and voltage tests on batteries. Makes stress cones and splices for underground pad mounts. May assist line crews in laying underground primary and secondary lines. May assist in constructing transformer pads, pull boxes, and concrete foundations for substations. Assists in maintaining and troubleshooting supervisor controls at substations. Performs related work as required.

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### NECESSARY KNOWLEDGES, ABILITIES, AND SKILLS

Considerable knowledge of the standard practices, materials, tools, and equipment of the electrical trade.

Considerable knowledge of the occupational hazards and safety precautions of the trade.

Knowledge of electrical control systems and associated industrial mechanical equipment.

Ability to understand and follow oral and written instructions, and to read and interpret blueprints, sketches, and schematics.

Ability to locate and repair defects in the control systems, related equipment, and devices.

Ability to make fast and accurate analyses, and to take necessary corrective action within prescribed standards.

Ability to maintain records and prepare necessary reports.

Ability and willingness to work extra hours as required.

Ability to establish and maintain effective relationships with superiors and other employees.

Ability and willingness to work from elevated structures or in other potentially hazardous areas.

Skill in the use of required tools and equipment, and the application of approved methods and procedures.

### DESIRABLE TRAINING AND EXPERIENCE

Graduation from high school and experience working at the journeyman level with various electrical control systems in an industrial facility or electrical utility system; or any equivalent combination of training and experience.