ELECTRICAL TECHNICIAN
Bargaining Unit Position

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DESCRIPTION:
Under general direction of the Supervising Electrical Technician, participates in the routine electrical maintenance, repair, and installation work associated with the operation, maintenance, and repair of water supply, flood control, hydroelectric and recreation facilities, and their various related components of the Yuba Water Agency’s facilities.

DISTINGUISHING CHARACTERISTICS:
The Electrical Technician is a journey-level technical classification. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies with the work unit. The Electrical Technician must perform his/her duties in a manner that reflects positively on the Yuba Water Agency, supports strong safety culture and meets the missions of the agency of flood control, water supply, fishery enhancement, recreation and hydroelectric generation.

EXAMPLES OF ESSENTIAL DUTIES:
This class description lists the major duties and requirements of the job and is not all-inclusive. Not all duties are necessarily performed by each incumbent. Incumbents may be expected to perform job-related duties other than those contained in this document and may be required to have specific job-related knowledge and skills to perform other duties as assigned.

- Participates in the testing, maintenance, repair, and installation of electrical equipment, high voltage apparatus, protective relays and programmable logic controllers.
- Performs inspections, troubleshooting, repair and maintenance to a variety of electrical equipment in dams and generating stations. This includes generators, exciters, voltage regulators, power transformers, oil, air and gas circuit breakers, reactors, capacitors, switches, motors, related control or auxiliary equipment, protective relays and programmable logic controllers using standard types of electrical testing and measuring equipment, computers and hand and power tools.
- Installs wiring and conduit, checks operation and function of electrical interlocks and auxiliary contactors, starters, various switch gear and station batteries.
- Performs programming, installation, calibration, testing, troubleshooting, maintenance and installation of electromechanical, solid–state and microprocessor protective relays, automation and control systems including PLCs and RTUs.
- Installs, maintains, troubleshoots and configures SCADA control systems and software.
- Plans and schedules work including submitting clearances to operations; arranges for necessary tools, equipment, supplies and support services.
- Maintains and makes field revisions to engineering documents and drawings.
- Furnishes instructions and assistance necessary for the timely completion of jobs. Keeps the supervisor informed regarding the status of work plans and work in progress in a timely manner.
- Completes all applicable documentation and test reports required to meet internal and Federal, State and local regulatory compliance.
- Responsible for accomplishing all aspects of the assigned work in conformance with personnel and equipment safety standards. Will comply with all agency equipment and safety policies and procedures and California Occupational Safety and Health Administration (Cal/OSHA) rules and regulations.
- Directs and trains apprentices, as necessary.
- Builds and maintains positive working relationships with co-workers, other agency employees and the public using principles of good customer service.
- Regular attendance and adherence to prescribed work schedule to conduct job responsibilities.
- Performs related duties as required.
KNOWLEDGE OF:

- High Voltage electrical equipment and properties.
- Principles of hydroelectric generation and/or transmission of electricity desired.
- Principles of safely working with electricity and electrical equipment.
- Electrical equipment, metering and measuring devices, supervisory and control equipment and wiring associated with the generation and transmission of electricity in a hydroelectric facility.
- Protective relays and their testing procedures. Programmable logic controllers and their programming.
- Allen-Bradley Governor Control Logic, RTU, SCADA, DCS Systems, Generator Exciter and AVR Systems.

SKILLED IN:

- Organizing work, setting priorities, meeting critical deadlines and following up on assignments with minimum direction.
- Communicating clearly and concisely, both oral and written.
- Troubleshooting control systems and resolving problems and situations in the workplace.

ABILITY TO:

- Install, test, adjust and maintain electrical equipment associated with hydroelectric facilities, including protective relays, supervisory and control equipment, instrumentation and metering equipment and associated wiring.
- Analyze equipment system problems and develop appropriate solutions.
- Keep complete and accurate records.
- Read, interpret and revise electrical drawings and schematics.
- Work cooperatively and effectively with others.
- Work independently with little or no direct supervision at times, using initiative and independent judgments within the appropriate supervision guidelines.
- Communicate effectively with co-workers.
- Support required NERC/WECC reliability standards and required reporting.
- Identify hazards in the workplace and prepare a Job Hazard Analysis, or similar process.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT:

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment: Work is performed in both inside and field settings, with some travel from site to site, with all types of weather and temperature conditions; exposure to noise, dirt, dust, traffic, electrical energy and high voltage; may work irregular hours; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain; frequent opportunity and requirements to interact with the general public and property owners, contractors, suppliers and state, federal, county and other public agencies.

Physical: Primary functions require sufficient physical ability and mobility to work in an office setting and in a field environment; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, and twist; walk on uneven terrain, loose soil, and sloped surfaces; to lift, carry, push, and/or pull light to moderate amounts of weight, up to but not limited to 50 pounds, in accordance with safe working practices; if lifting more than 50 pounds use two or more people to lift load; to operate office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; to travel to other locations; to operate equipment and vehicles, and to verbally communicate to exchange information. Must be able to climb ladders, climb multiple flights of stairs; have the dexterity to climb in and out of, and ability to work in close quarters. Requires the use of safety hats, belts, harnesses, face guards, safety glasses and goggles, safety shoes,
protective clothing including Arc Flash/FR clothing, ear protection and other safety equipment, where necessary.

**Vision:** See in the normal visual range with or without correction.

**Hearing:** Hear in the normal audio range with or without correction.

**MINIMUM QUALIFICATIONS:**
The minimum and preferred requirements are listed below. While the following requirements outline the minimum qualifications, the agency reserves the right to select applicants for further consideration who demonstrate the best qualifications and match for the job. Meeting the minimum qualifications does not guarantee further participation in the selection process.

**Education/Training:**
Graduation from high school or equivalent. Must possess basic math skills, and completion of Trigonometry is preferred.

**Experience:**
Two years of journeyman experience or other equivalent training program and experience in maintenance and repair of equipment and systems similar to that found in the agency power project preferred. Experience with Allen-Bradley Governor Control Logic, RTU, SCADA, DCS Systems, Generator Exciter and AVR Systems is highly desired. Three years’ experience in high voltage work environments, preferred.

**License or Certificate:**
Completion of an electrical apprenticeship program. Possession of and ability to maintain, an appropriate valid class C California Driver License.

**SPECIAL REQUIREMENTS:**
This position is subject to call out at any time and must reside close enough to travel to the Colgate Powerhouse within one hour.

**POST-OFFER/PRE-EMPLOYMENT PHYSICAL:**
Employment is subject to passing a physical examination, including a drug test, and a pre-employment background check.

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