City of Alameda
Code No. 7711
Approved by C.S.B.
July 1, 2020

ELECTRICAL EQUIPMENT SUPERINTENDENT

DEFINITION

Under general direction, plan, organize, supervise, and manage the work of operational groups engaged in the construction, operation, and maintenance of electrical substations, electrical equipment, and meters, as well as system control and dispatch functions. Perform other related work as required.

DISTINGUISHING FEATURES

This is a single-position, mid-management level classification responsible for the supervision and management of the electrical maintenance and system control sections of the Engineering and Operations Division in the Alameda Municipal Power Department (AMP). Work in the class is distinguished from that of lower classes by the overall responsibility for major and/or complex projects or assignments, by the level and extent of management, administrative, and supervisory responsibilities, and by the level of professional specialization and expertise required.

EXAMPLES OF DUTIES

1. Supervise, train, evaluate, and oversee training of assigned staff; conduct performance evaluations, recommend disciplinary procedures as required; and develop and ensure continued compliance of goals, objectives, policies, procedures, and practices for assigned sections.

2. Plan, organize, and direct the following functions: dispatch and associated transmission and distribution system controls; the installation, calibration, testing, servicing and repair of electrical equipment, meters, substation equipment; SCADA system and radio communication system operation and maintenance; and the operation, maintenance and construction of substations.

3. Provide technical expertise and serve as a liaison role to other divisions, departments, and external agencies; coordinate operation and maintenance of the Northern California Power Agency's combustion turbine located in Alameda; coordinate switching activities on the transmission and distribution systems with personnel, customers and power suppliers; supervise the planning and implementation of switching orders to provide clearances for dispatch operations and field personnel; respond to public concerns and complaints and ensure they are handled promptly and professionally.

4. Implement and ensure applicable regulatory compliance requirements are being met, including North American Electric Reliability Corporation (NERC)/Western Electricity Coordinating Council (WECC)/Federal Energy Regulatory Commission (FERC) compliance and take proactive action to address issues.

5. Assess substation reliability and recommend solutions to address deficiencies; develop and implement plans to acquire and integrate solutions that enhance safe and reliable power delivery; maintain a balanced system; and investigate system problems and make recommendations for corrective action.

6. Ensure adherence to and application of established safe work practices and procedures; and ensure the continuous safe and timely response to electric system emergencies by dispatch, system control, and field service personnel.

7. Review construction drawings and coordinate related work and materials; prepare plans, drawings, specifications and estimate metering installations; and schedule and oversee work of contractors.

8. Prepare various studies and reports regarding the use of equipment, work methods, materials, services and administrative improvements; and maintain logs and reporting functions, such as outage reports, system abnormal reports, and project status reports.

9. Prepare and administer section budgets; and administer equipment and supply procurement request activities.

10. Maintain appropriate staffing levels; and monitor workloads, assigned projects, and the quality of work output.

11. Perform other related duties as required.

EMPLOYMENT STANDARDS

Education/Experience

Any combination equivalent to education and experience likely to provide the required knowledge and abilities. A typical way to obtain the knowledge and abilities would be:

Education: Graduation from high school supplemented by college course work in science, electronics, engineering, advanced electrical theory, and mathematical theory as applied to electric utilities, or related field.

Experience: Five years of journey-level electrical utility operations and maintenance experience involving substation, meter, and equipment testing, maintenance, installation and operation; transmission and distribution system dispatching using a SCADA system, which included two years of supervisory or crew-lead experience; or Two years of experience equivalent to Substation and Meter Supervisor, Chief System Operator, or Line Working Supervisor with the City of Alameda.

Knowledge

Knowledge of electrical theory; electric utility transmission and distribution system operation; substation and distribution equipment and operation and maintenance; SCADA system operation and maintenance; application, use, and maintenance of radio communication systems; testing, repair, installation of meters and protective relays; power scheduling practices; work methods, materials, and equipment; construction plans and drawings; industry regulatory requirements; safe work practices and procedures; training methods and practices; modern business computer operations and applications including input, retrieval, and analysis of information using word processing, spreadsheet, mapping, and database programs such as Microsoft Word, Excel, Geographic Information Systems (GIS), and various web-based business application systems; communication technologies and media including smart phone, email and internet; principles and practices of supervision; effective methods of leading and training staff; and effective methods of communications both oral and written.

Ability

Ability to effectively manage 24-hour operation of electrical transmission and distribution systems; respond by phone and in person in an emergency; effectively plan, organize, direct staff and control the operations of several work sections; plan work schedules and monitor performance; interpret and apply established procedural and safety requirements; prepare specifications and evaluate bids; read and interpret electrical transmission and distribution maps and drawings; implement improvements in organization, work procedures and equipment; prepare budgets and track costs; analyze complex, technical and administrative problems and make sound recommendations for their solution; establish and maintain accurate records; prepare clear and concise reports; learn and comply with specific industry regulatory requirements such as the North American Electric Reliability Corporation (NERC)/Western Electricity Coordinating Council (WECC)/Federal Energy Regulatory Commission (FERC); learn and apply agency budgeting practices; learn and apply agency procurement policies and practices; learn and apply effective management and leadership principles and practices; maintain level of knowledge required for satisfactory job performance; proficiently utilize modern work related technology and business computer applications; communicate effectively; establish and maintain effective working relationships with employees and the general public; and supervise, train, evaluate, and discipline assigned staff.

Special Requirements

Willingness and ability to respond to after-hours emergency calls as required as part of managing a 24/7 operation.

Other Requirements

Possession of a valid California Driver's License and satisfactory driving record at the time of appointment is required as a condition of initial and continued employment only if the operation of a vehicle, rather than the employee's ability to get to/from various work locations in a timely manner, is necessary to perform the essential functions of the position.

Revision History

Approved by C.S.B. April 3, 2002
Job duties expanded and updated April 2020