

SENIOR ELECTRIC ENGINEERING TECHNICIAN

DEFINITION

To organize, assign and review the work of assigned staff engaged in technical office and field engineering work in support of the planning, design, construction, operation and maintenance of electrical distribution systems; to perform a wide range of technical engineering and administrative duties including the more complex phases of construction cost estimating requiring specialized knowledge; and to provide highly responsible technical support to assigned supervisor.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey level in the Electric Engineering Technician series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed, complexity of duties assigned, independence of action taken, by the amount of time spent performing the duties, and by the nature of the public contact made. Employees perform the most difficult and responsible types of duties assigned to classes within this series, including performing technical engineering and administrative office and field work and providing lead technical and functional supervision over assigned staff. Employees at this level are required to be fully trained in all procedures related to assigned areas of responsibility.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the assigned supervisor; and may receive technical and functional supervision from more experienced staff.

Exercises technical and functional supervision over assigned technical staff.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Plan, prioritize, and review the work of staff assigned to a variety of technical office and field engineering work involving the planning, design, construction, operation and maintenance of electrical distribution systems.

Develop schedules and methods to accomplish assignments ensuring work is completed in a timely and efficient manner.

Participate in evaluating the activities of staff, recommending improvements and modifications.

Assists in the coordination of staff training; works with employees to correct deficiencies.

Perform a wide range of technical engineering and administrative duties including the more complex phases of construction cost estimating, planning, design and review of special and

major development projects including replacement work, and the development and implementation of design and construction standards.

Perform engineering work related to reconductors, major subdivisions, underground projects and large preventative maintenance projects.

Assist Utility Director in the development and updating of material and construction standards; assist the Utility Director with tracking performance metrics; assist in the completion and updating of studies through calculations related to the design and monitoring of the City's electrical system and operations; aid in the interpretation of regulatory requirements and recommend steps to ensure that they are met.

Prepare, by use of computer aided drafting software (i.e. ACAD) and/or other related tools, detailed plans for needed maintenance and/or replacement work; provide special instructions for the materials, location of poles, anchors, guys, conduit systems, vaults, service boxes, transformers, labor estimates and other necessary information required to complete the work.

Determine proper cable, wire sizes, and transformer sizes for given loads on the distribution system.

Coordinate layout for major subdivisions with other city and third party utilities, ensure that overall City interests are a priority when the coordinating is complete; work with developers, consultants, contractors, property owners and other utilities on and alongside the Electric Coordinator/Inspector on construction activities and proposed additions and changes to the City's electric utility system.

Conduct field surveys of project sites to determine existing and future locations of electric and other facilities and the impact of proposed changes.

Determine the existence of easement and requirements for new easements; initiate the process to gain easements prior to construction where new easements are required.

Maintain appropriate records of electric system facilities and various technical, statistical or narrative reports.

Coordinate and oversee the City's solar rebate program and ensure conformance with State of California eligibility list and related requirements.

Build and maintain positive working relationships with co-workers, other City employees and the public using principles of good customer service.

Foster an environment that embraces diversity, integrity, trust, and respect.

Be an integral team player, which involves flexibility, cooperation, and communication.

Perform related duties as assigned.

## MINIMUM QUALIFICATIONS

### Knowledge of:

Relevant local, State, and Federal laws, rules and regulations related to area of assignment.

City of Healdsburg design standards and ordinances.

Principles and practices of the fundamentals of engineering methods, materials and equipment used in construction and maintenance of overhead and underground electrical distribution facilities.

Principles, practices, and terminology of varied technical engineering work including, surveying, plan review, and reference of industry standards and requirements.

Advanced engineering mathematics including algebra, geometry, and trigonometry.

Methods and procedures of specialized computer applications, including computer-aided design, geographical information systems (GIS), word processors, databases, spreadsheets and specialized software.

Work orders, asset management, project management, purchasing, and inventory.

Methods and procedures of work safety on construction sites.

Principles and practices of lead-technical and functional-supervision and training.

### Ability to:

Perform the most complex duties related to technical office and field engineering support work involving the planning, design, construction, operation and maintenance of electrical distribution systems.

Intermittently, review documents related to department operations; observe, identify and problem solve office operations and procedures; understand, interpret and explain department policies and procedures; explain operations and problem solve issues for the public and with staff.

On a continuous basis, sit at desk for long periods of time; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone, write or use a keyboard to communicate through written means; and lift or carry weight of 25 pounds or less.

Provide technical and functional supervision over assigned staff; effectively train staff.

Gather data and make accurate engineering computations.

Analyze engineering technical and statistical information, evaluate alternatives and make sound recommendations.

Estimate time and material requirements for electrical utility projects.

Make repeatedly accurate mathematical calculations.

Prepare accurate and complete records and notes; prepare clear and concise reports, correspondence and other written materials.

Comprehend and correctly apply regulatory requirements and industry standards.

Use sound judgment in recognizing scope of authority.

Operate and use modern office equipment including computers and applicable software.

Maintain regular attendance and adhere to prescribed work schedule to conduct job responsibilities.

Utilize appropriate safety procedures and practices for assigned duties.

Establish and maintain effective working relationships with those contacted in the course of work.

Work with various cultural and ethnic groups in a tactful and effective manner.

Communicate clearly and concisely, both orally and in writing.

### Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

#### Experience:

Five years experience in the planning and design of the requirements necessary for the construction, repair, replacement, and/or maintenance of a High Voltage electrical distribution system.

#### Training:

Equivalent to the completion of an Associate's degree from an accredited college with major course work in construction management, civil engineering, construction science, electrical engineering, or a related field.

#### License and Certificate

Possession of a valid California Class C Driver License is required at the time of appointment. Failure to obtain or maintain such required license(s) may be cause for disciplinary action. Individuals who do not meet this requirement due to a physical disability will be considered for accommodation on a case-by-case basis.