

ELECTRIC ENGINEERING TECHNICIAN I  
ELECTRIC ENGINEERING TECHNICIAN II

DEFINITION

To perform technical engineering work in support of the planning, design, construction, operation and maintenance of electrical distribution systems; to assist other engineering staff in the performance of office and field engineering work; to interact frequently with City staff and customers; and to provide technical support to an assigned supervisor.

DISTINGUISHING CHARACTERISTICS

Electric Engineering Technician I - This is the entry level class in the Electric Engineering Technician series. Positions in this class typically have little or no directly related work experience and work under immediate supervision while learning job tasks. The Electric Engineering Technician I class is distinguished from the II level by the performance of less than the full range of duties assigned to the II level. Incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processes of assigned area of responsibility are learned.

Electric Engineering Technician II - This is the journey level class in the Electric Engineering Technician series and is distinguished from the I level by the assignment of the full range of duties. 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 within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the I level.

This class is distinguished from the Senior Electric Engineering Technician in that the latter performs the more complex technical engineering, administrative office, project management, and field work and provides technical and functional supervision over assigned staff.

SUPERVISION RECEIVED AND EXERCISED

Electric Engineering Technician I

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

Electric Engineering Technician II

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

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

Perform technical engineering work in support of the planning, design, construction, operation and maintenance of electrical distribution systems; assist other engineering staff in the performance of office and field engineering work.

Assist or prepare detailed plans, specifications, cost estimates and material allocations in connection with new and upgraded residential, commercial and City electric construction and maintenance projects.

Assist in the development of electrical projects associated with the construction, maintenance or removal of a variety of electrical facilities such as service drops, line extensions, transformers, meters, switch gears and street lighting; track and verify data on pending and completed work.

Assist in determining proper wire sizes and metering equipment, transformer sizes and combinations for given loads on the distribution system; assist or obtain easements for electric system facilities.

Assist in the input and maintenance of geographical information system (GIS) data for new and existing electric infrastructure; add or update features and create maps as needed.

Assist in the coordination of electrical distribution system and street lighting activities with other City departments and divisions, and with outside agencies.

Assist and work with City staff and consultants in coordinating the City's solar rebate program and evaluating solar equipment to determine and ensure conformance with State of California eligibility list and related requirements.

Assist in determining the effects of proposed work on existing electric utility facilities and the feasibility of alternate construction proposals.

Assist in the maintenance of Electric Service Requirements Manual and Electric Utility Department's web page.

Navigate and utilize work order and customer information system.

Respond to customer complaints and questions as well as help customers with the electrical distribution.

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

### Electric Engineering Technician I

#### Knowledge of:

Safety practices and regulations related to area of work.

Fundamental basics of electricity, electrical engineering and electric utilities.

Mathematics including algebra, geometry, and trigonometry.

Methods to update and enter data into a variety of databases, spreadsheets, and software tools.

Methods and tools of computer aided drafting.

#### Ability to:

Perform technical engineering work in support of the planning, design, construction, operation and maintenance of electrical distribution systems.

On a continuous basis, know and understand operations, and observe safety rules; intermittently analyze problem equipment; identify and locate equipment; interpret work orders; reading of Utility Maps; and explain jobs to others.

Intermittently, sit while studying or preparing reports; bend, squat, climb, kneel and twist when performing installation of equipment; perform simple and power grasping, pushing, pulling, and fine manipulation; and lift or carry weight of 25 pounds or less.

Learn methods and materials used in the construction, operation, and maintenance of an electrical distribution system.

Maintain proficiency with specialized computer applications, including computer-aided design, geographical information systems (GIS), word processors, databases, spreadsheets, pole loading software (O-Calc), and other industry specialized software.

Produce construction sketches, update drawings, review plans and documents for conformance to regulations.

Gather data and make accurate engineering computations.

Understand and correctly and consistently implement the City of Healdsburg's Electric Service Requirements.

Interpret and apply common utility designs for electric utilities including for new service designs.

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.

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

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:

Some construction, operation, or maintenance of an electrical distribution system experience is desirable.

#### 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, GIS or a related field.

### License and Certificate

Possession of a valid California Class C Driver License is be 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.

### Electric Engineering Technician II

In addition to the qualifications for the Electric Engineering Technician I:

#### Knowledge of:

Methods and materials used in the construction, operation, and maintenance of an electrical distribution system.

Principles and practices of electricity, electrical engineering and electric utilities.

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

City of Healdsburg's Electric Service Requirements.

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

#### Ability to:

Produce construction sketches, update drawings, review plans and documents for conformance to regulations.

Gather data and make accurate engineering computations.

Prepare job packages in a timely and accurate manner.

Prepare plans and specifications, neatly and accurately.

#### 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:

Three years of responsible experience similar to Electric Engineering Technician I with the City of Healdsburg.

### 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, GIS or a related field.

### License and Certificate

Possession of a valid California Class C Driver License is be 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.