



CITY OF LODI
Department of Human Resources
City Hall, 221 West Pine Street, 2nd Floor
Lodi, CA 95240

<http://www.lodi.gov>

INVITES APPLICATIONS FOR THE POSITION OF:

Substation Technician

An Equal Opportunity Employer

SALARY

\$60.49 - \$63.52 Hourly \$4,839.29 - \$5,081.42 Biweekly \$10,485.13 - \$11,009.74 Monthly
\$125,821.54 - \$132,116.92 Annually

OPENING DATE: 08/27/19

CLOSING DATE: Continuous

THE POSITION



New Salary - January 2020 (4% COLA) \$133,974.40 - \$137,401.59

Work Where You Live - The City of Lodi is home to 65,000 residents, ideally located adjacent to Highway 99 and I-5, 34 miles south of Sacramento, 10 miles north of Stockton and 90 miles east of San Francisco. The City of Lodi is a community surrounded by lush parks, wineries, museums, a lake and open space. Lodi Electric Utility was founded in 1910. For over 100 years, we have prided ourselves in providing safe and reliable electricity. Lodi Electric strives to anticipate the future needs of our customers and develop a plan to meet those needs as cost-effectively as possible while maintaining excellent service. We look to continue to provide the community of Lodi with reliable, affordable, clean and safe power for many years to come.

The examination process will consist of a competitive evaluation of qualifications based on a review of the Application and the Supplemental Questionnaire; therefore, it is to your advantage to provide as much detailed and relevant work experience as possible, as a resume will not be accepted or reviewed in lieu of the application materials.

This recruitment is open until filled. Applications will be accepted and processed until a sufficient number of qualified applications have been received. This recruitment may close without further notice; interested candidates should apply as soon as possible.

Job descriptions are intended to present a broad and general range of duties which includes, purpose, responsibilities, and scope of work. Job descriptions are not intended to reflect all duties performed within the job.

DEFINITION

Under general direction, specialize in low, medium and high-voltage substation work, including switching, equipment maintenance and calibration; performs skilled work in electrical construction, maintenance and troubleshooting of electric utility facilities such as electric generation, transmission, distribution telemetering, revenue metering, communications and data systems including copper and fiber installation, testing, maintenance and repair and does related work as required.

DISTINGUISHING CHARACTERISTICS

This is an advanced journey level class position. Positions in this class differ from the Electrician class in that

they perform a wider range of skilled tasks with limited direct supervision. This class is subject to emergency call outs.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from higher level personnel. May be assigned supervisory duties in the absence of the supervisor.

EXAMPLES OF DUTIES

Duties include, but are not limited to the following:

Substation duties are essential functions of this position. Under general direction, specialize in low, medium and high-voltage substation work, including switching, equipment maintenance and calibration; performs skilled work in electrical construction, maintenance and troubleshooting of electric utility facilities such as electric generation, transmission, distribution telemetering, revenue metering, communications and data systems including copper and fiber installation, testing, maintenance and repair;

Install, test, calibrate, maintain, troubleshoot and repair simple and complex protective relays, regulator control and operating devices, power transformer protective and safety devices and maintain appropriate records for calibration, testing and maintenance;

Install, maintain, test and repair 60-kV and 12-kV power circuit breakers; perform periodic trip testing;

Sample, test and evaluate condition of insulating media and maintain appropriate records; maintain, test and repair, 60/12-kv power transformers and load tap changers; sample test and evaluate insulating oil and maintain appropriate records;

Troubleshoot, repair, maintain and calibrate computer-based SCADA system, transducers, input devices, communication equipment and data transmission equipment; Perform periodic inspections of substation equipment and facilities and maintain appropriate records, including building, site and yard maintenance and housekeeping; maintain substation properties in good working order and clean condition;

Perform substation high-voltage switching operations; Performs shop and field calibrations of electric meters; Repairs and rebuilds meters as necessary;

Installs current and voltage transformers with associated equipment and verifies the complete installation to assure accurate metering;

Conducts the scheduled testing and circuit analysis of existing revenue metering facilities; Test, calibrate, maintain and repair indicating and recording instruments and measuring devices; test, calibrate, maintain and repair distribution system line equipment such as transformers, capacitors, regulators, reclosers and associated control equipment; test prior to energization and perform fault locating of high-voltage underground cable systems;

Perform infrared scanning of substation and distribution equipment; Perform field and substation surveys to locate and determine the cause of radio and TV interference problems and make recommendations for appropriate corrective measures; perform site surveys to determine and analyze power-quality conditions and make recommendations for corrective measures;

Install, troubleshoot, maintain and repair fiber optic systems and associated equipment;

Answer emergency calls during and outside of normal working hours, evaluates City emergency problems, performs troubleshooting of electrical equipment;

Generally works independently in determining source of problems and making emergency repairs;

Communicates with and instructs electricians and other technicians, as necessary; and

Performs other duties related to the operation of the department and the City including additional duties that enable the department and City to meet the diverse needs of its community,

TYPICAL QUALIFICATIONS

MINIMUM QUALIFICATIONS

Knowledge of:

General fundamentals of electrical theory, including solid state circuitry control relaying, protection relaying, control and power switching schemes, fiber networks and installation;

General tools, methods and materials used in electrical electronic, and fiber optic work;

Instrumentation and specialized testing equipment, precision tools associated with fiber optic networks, installation and maintenance of substation transformers, controls, protection, telemetering and low through high voltage circuit breakers;

Electrical codes including NFPA 70E, OSHA Regulations and other codes as applicable; Safe work practices and procedures including high voltage switching procedures; Maintenance and operation of substation, controls, power flow, protection, telemetering, fiber optic networks and data transport equipment;

Tools, equipment and methods to locate and determine the cause of radio and TV interference problems both in the field and substations; Tools, equipment and methods used to analyze power quality on various voltage systems;

Safety requirements and precautions necessary while working with low medium and high voltage systems; and Electric meter testing and repair; metering methods for single and polyphase circuits; AC and DC circuits with particular reference to Ohm's Law, Kirchoff's Law and Blondel's Theorem; applicable environmental regulations and reliability standards.

Ability to:

Under general direction, specialize in low, medium and high-voltage substation work, including switching, equipment maintenance and calibration; performs skilled work in electrical construction, maintenance and troubleshooting of electric utility facilities such as electric generation, transmission, distribution telemetering, revenue metering, communications and data systems including copper and fiber installation, testing, maintenance and repair;

Apply knowledge applicable to the job and assignments; Demonstrate a high degree of aptitude and ability for electrical, electronic, fiber optic and mechanical work; work independently with limited direct supervision; work as a crew member on large construction projects;

Understand and carry out written and oral instructions;

Make recommendations to correct both power quality and radio interference complaints on city and customer owned facilities; effectively organize information and data; prepare and write reports;

Perform maintenance, troubleshooting and repair on a wide variety of electrical and electronic equipment commonly found in a substation or distribution or revenue system; Install and retrofit substation equipment;

Use precision instruments and testing equipment to obtain specified performance; Develop and follow testing and preventative maintenance programs and keep appropriate records;

Read, interpret, and update electrical drawings, plans, diagrams and specifications, sketch electrical drawings to reflect as built systems;

Supervise the activities of the Division during the absence of the assigned Supervisor;

Ability to lift and carry for short distances objects as heavy as 60 lbs.; and Establish and maintain cooperative working relationships with other employees and the public.

EXPERIENCE AND EDUCATION

Experience

Attainment and proof of journey status through apprentice training as an Apprentice Electrician (usually 48 months of experience) with electric utility experience as a Substation Electrician or Technician. This experience typically would include performing electrical maintenance, calibration, and troubleshooting (with emphasis on substation equipment). Experience with solid state circuitry and computer based test equipment, control, monitoring and analysis systems and associated tools required.

Education

Completion of high school or its equivalent; completion of Journey Level status through apprenticeship training and work experience.

LICENSE

Possession of the appropriate valid driver's license from the California Department of Motor Vehicles.

WORKING CONDITIONS

Hazardous conditions are an extremely critical factor of this job, working in close proximity to energized lines and equipment up to 60,000 volts. Incumbents in this classification are required to:

Use common hand tools such as hammers, saws, and screwdrivers; make precise arm-hand positioning movements when working with electrical hand tools, for example, when using a socket wrench to tighten overhead fittings; climb ladders or step to reach objects; Make continuous, repetitive arm-hand movements when working with screwdrivers or tightening or loosening nuts and bolts; Coordinate movement of more than one limb simultaneously and make fine, highly controlled muscular movements while operating equipment used to set such items as substation breakers;

Bend and stoop repeatedly or continually over time when working in electrical panels or picking up cones; Work in a variety of weather conditions with exposure when working in substations;

Observe or monitor such items as electrical meters for compliance with safety standards; Make skillful, controlled manipulations of small objects when connecting bolts on breakers to live panels or working with fuses;

Use arms above shoulder level when installing overhead conduit or fixtures; Work in small, confined areas, when working in a bucket truck or with panels that are difficult to access; Work while standing on extension ladders or lift trucks at heights greater than 25 feet, such as when servicing or repairing substation bus; hear alarms and other auditory warning devices such as vehicle back-up bells or electrical panel audible alarms;

Use stomach and lower back muscles to support the body when lifting heavy electrical equipment during installation, or when climbing in and out of the truck cab or bucket; Walk over rough, uneven or rocky surfaces to access work sites in substations;

Lift and move electrical components or other objects weighing up to 60 pounds short distances;

Discriminate among and identify individual colors or match colors of electrical wires;

Communicate orally both face to face and using a telephone or radio when receiving or communicating status of work assignments;

Sit for extended periods of time with the ability to move about at will when working on ground level electrical facilities.

*FLSA Status: NON-EXEMPT

SUPPLEMENTAL INFORMATION

Apply online at www.lodi.gov or in person at Human Resources Department, City Hall, Second Floor, 221 West Pine Street, Lodi, CA. Telephone: 209/333-6704.

Persons with hearing impairment, please call the California Relay Service 7-1-1.

Evaluation of Qualifications: Application materials and resumes will be screened to determine if applicants are considered to be among the most qualified as outlined on the job announcement. Only applicants who are among the most qualified will be invited to participate in the testing process. Resumes may not be substituted for a completed application.

EQUAL OPPORTUNITY EMPLOYER - The City of Lodi is an equal opportunity employer and is committed to a policy of fair employment practices regardless of race, color, ancestry, national origin, religion, sex or sexual orientation, marital status, age, mental or physical disability or perceived disability, medical condition, pregnancy, political affiliation or belief, or other unlawful discrimination.

AMERICANS WITH DISABILITY ACT - In compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act, the City of Lodi provides reasonable accommodation for qualified individuals with disabilities. Individuals with disabilities requiring accommodations must contact the Human Resources Division upon application submittal to confirm the request.

CRIMINAL BACKGROUND INFORMATION - City of Lodi is authorized and required by the state of California to access Local, State, and/or Federal criminal history as part of the testing process. This process can be completed by initial fingerprinting and/or a full Background investigation pursuant to Penal Code §11105(b) (10), §11105.3, §13300(b)(10); Education Code §10911.5; Public Resources Code §5164) and in compliance with the City of Lodi's Fingerprinting Policy and Procedure. As a future employee or volunteer, you are required to be fingerprinted and processed through the Department of Justice and cleared before you can start. All information obtained will be kept in strict confidentiality.

HIRING PROCEDURE - Applicants must possess the minimum qualifications by the final filing date. Eligible lists are established upon successful completion of the selection process. The candidates must be successful in each part of the testing. To fill each vacancy the hiring department will request names to be certified from the eligible list and will make a selection from this certification list.

CONDITIONAL JOB OFFERS - Conditional job offers are subject to successful completion of a medical drug screen and/or physical. Candidates should not quit or give notice to their current employer until final notification has been awarded by the Human Resources Division.

MEDICAL-DRUG SCREENING - All positions may be subject to a physical or drug screen issued by a qualified medical physician assigned by the Human Resources Division. Under the requirements of the Drug Free Workplace Act of 1988, the City of Lodi has been designated as a drug-free workplace.

APPOINTMENT - At the time of appointment all candidates will be required to execute an oath of allegiance and complete Form I-9 - Employment Eligibility Verification in compliance with the Immigration and Naturalization Act. United States citizenship is not required. All new appointees are required to successfully complete a probationary period of twelve months.

EMPLOYMENT BENEFITS SALARY - The starting salary is the first rate shown on the job announcement. Advancement to the higher steps of the salary range is based upon merit in accordance with the Salary Ordinance and Rules for Personnel Administration. Eligibility for the first merit increase is effective after 12 months and for additional merit increases after one year intervals until the employee has reached the maximum step.

HOLIDAY, VACATION, SICK, AND ADMINISTRATIVE LEAVE - Holiday - An average of 13 paid holidays per year. Vacation - 2 weeks paid vacation annually, increasing with length of service depending upon the appropriate labor agreement. Sick Leave - 10 days per year depending upon the appropriate labor agreement. Administrative Leave - Management/Mid-Management positions receive 80 hours per fiscal year, and specified professional/technical positions receive 40 hours per fiscal year (Pro-Rated).

HEALTH INSURANCE - Medical, Dental and Vision plans are available for employee and dependents. A portion of the premiums may be the employee's responsibility.

LIFE INSURANCE AND LONG TERM DISABILITY - The City pays the full premium for employee and dependent life insurance, and offers a long-term disability plan that provides up to approximately 2/3 of an employee's salary.

RETIREMENT AND DEFERRED COMPENSATION - The City of Lodi is a member of the Public Employees' Retirement System (P.E.R.S.). Lodi is not a member of the Social Security System except for the required medical contribution. Employees may participate in a 457 Deferred Compensation program.

FLEXIBLE SPENDING ACCOUNT - Employees may participate in a Section 125 Flexible Spending Account.

IMPORTANT NOTE: This bulletin does not constitute an expressed or implied contract. Any provisions or job duties contained in this bulletin may include modifications pending labor agreements and/or council approval.

APPLICATIONS MAY BE OBTAINED AND FILED ONLINE AT:

<http://www.lodi.gov>

OR

City Hall, 221 West Pine Street, 2nd Floor
Lodi, CA 95240

EXAM #6565.8.2019

SUBSTATION TECHNICIAN

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Substation Technician Supplemental Questionnaire

- * 1. I understand that in order for my application to receive every consideration in the selection process, I must complete all of the application (education, experience, etc.) along with the following Supplemental Questions and provide concise but detailed answers. I understand these responses must match the information I provide in the Work Experience and Education sections of my application. When answering narrative descriptions of my experience, I understand that I must include the name of the employer, dates of employment, and the name and phone number of my supervisor.

Do not refer to a resume or other documentation in lieu of completing the employment history section or responding to the supplemental questions; they will not be reviewed or considered.

I certify that all the information provided on my application and this Supplemental Questionnaire is true to the best of my knowledge.

I have read and understand the above instructions

- * 2. This position requires attainment and proof of journey status through apprentice training as an Apprentice Electrician (usually 48 months of experience) with electric utility experience as a Substation Electrician or Technician. Do you possess and meet this requirement?

Yes No

- * 3. If you answered "YES" to question #3, you must attach proof of journey level status. I have attached proof of my journey level status as indicated in question #3.

Yes No

- * 4. Describe your previous experience working in Substations? Please give a detailed answer as to length of time and duties performed. If no experience, enter N/A.

- * 5. Do you have experience in high voltage substation switching? If so, give examples of devices you have operated and the necessary safety precautions associated with each device. If no experience, enter N/A.

- * 6. What is your experience working with solid state relays? Give a detailed list of devices you have experience with. If no experience, enter N/A.

* Required Question