



Electrical Engineer/Electric Utility Engineer

SALARY: \$3,993.23 - \$6,058.62 Biweekly

\$8,652.00 - \$13,127.00 Monthly \$103,824.00 - \$157,524.00 Annually

OPENING DATE: 04/21/22

CLOSING DATE: 05/22/22 11:59 PM

DESCRIPTION:



Electrical Engineer: \$10,098.00 - \$13,127.00 per month Electric Utility Engineer: \$8,652.00 - \$11,248.00 per month

The City of Redding Electric Utility is seeking to fill two full-time vacancies as either an Electrical Engineer or an Electric Utility Engineer.

- 1. Electrical/Electric Utility Engineer (Protection) The ideal candidate for this position will have experience in protection systems relating to transmission, distribution and generation. This individual will design, develop, analyze and test protective relaying and control systems within the REU system, and be responsible for applicable NERC compliance and capital projects related to system protection.
- 2. Electrical/Electric Utility Engineer (Substation) The ideal candidate for this position will have experience in substation maintenance and design. This individual will perform engineering as required to maintain/modernize REU substations, work in conjunction with the REU substations group, and be responsible for applicable NERC compliance and capital projects related to REU substations.

The City of Redding provides an excellent benefit package including health, dental, vision, life and long term disability insurance, paid time off and a CalPERS retirement program along with a great work environment. This position will receive a 2% increase July 2022.

WE ARE LOOKING FOR SOMEONE TO:

Electrical Engineer

Perform and implement studies as assigned to formulate recommendations for the electric
utility in connection with a wide range of activities involving generation, transmission lines,
distribution lines, substations, system operation, system protection, metering,
communications, load forecasting, system planning, budget planning, transmission and

- distribution routing studies, easement acquisition, and other assignments typical of electric utility power systems
- Manage utility construction projects (substations, transmission lines, etc.), supervise operation and maintenance of completed projects
- Take responsibility for contract preparation and administration, design, construction, operation and maintenance schedule coordination, investigate and analyze liability claims, inter-utility coordination, and quality control. This may involve making field decisions and supervision of any and all tests required to assure specified results
- Work with and provide guidance to management and/or utility's customers in matters
 pertaining to the efficient use of electrical energy, system protection, power-factor
 correction, and grid connected alternate energy sources
- Coordinate the work of outside consultants on major engineering programs or studies
- · Assist in preparation of the utility's annual budget and capital improvement plans
- Develop long-range plans to ensure the technical merit, and adequate capacity and reliability of the utility in the foreseeable future. Conduct service reliability studies and compile reports

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Electric Utility Engineer

- Develop, implement, administer, maintain and support technical systems used by the
 Electric Department personnel. Technical systems could include: energy accounting
 software, supervisory control and data acquisition systems ("SCADA"), distribution control
 and protection equipment, contingency analysis software, engineering software, intercontrol center protocol communications equipment and software, etc. Incumbents may be
 engaged in the design, documentation, coding, testing and implementation of new or
 enhancements to existing application programs. Incumbents may be tasked to prepare
 user documentation and train personnel in the proper use of programs and equipment.
- As assigned, lead or participate as a team member in capital and maintenance projects.
 This includes, but is not limited to: writing bid specifications; writing service contracts; obtaining necessary regulatory approvals; procuring materials; testing and commissioning of project; overseeing financial tracking of project; ensuring documentation is updated; training of personnel on changes as applicable; and ensuring good public relations are maintained.
- Develop, implement, and administer training, safety and environmental procedures and programs. Continuously strive for improvements of division training content and culture.
- Under guidance of a supervisor with responsible charge of the work, perform a variety of
 professional engineering activities related to the design, construction, maintenance, and
 operation of the facilities of the Redding Electric Utility.
- Assist in the design of new and/or modifications to existing utility facilities including
 analysis of power line structures, complex relay and control schemes, development of
 construction drawings and contract documents for equipment and construction, acquisition
 of permits, easements and property; coordination of joint projects with outside agencies;
 provide guidance for assigned draftsmen; coordinate work of consultants, outside
 agencies and other staff as required.
- Ensure adequate capacity and reliability of the electric system (transmission and distribution lines, substations) through development of load forecasts, expansion plans, load transfer schemes; system analysis.
- Develop new, or improved engineering and electric utility standards where necessary; consult with field personnel, other electric utilities, manufacturers, and literature sources, such as the National Electric Code, ANSI standards, and G.O. 95.
- Inspect and monitor system equipment, including metering, capacitors, regulators, power
 circuit breakers, transformers and protective devices; and recommend needed system
 improvements. Ensure that system power factor, equipment loading, voltage, and
 protective device settings are within specified limits without creating operating problems
 within the electric system; recommend new equipment purchases when needed.

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QUALIFICATIONS WE'RE LOOKING FOR:

Electrical Engineer

- Knowledge of electric utility engineering and operating practices
- Knowledge of transmission line design and construction
- · Knowledge of design of electrical power facilities
- · Knowledge of system planning

- Knowledge of system protective relaying and control; standards/codes for transmission, distribution, and generation facilities including NEC, NESC, GO95, ANSI and IEEE
- Knowledge of North American Electric Reliability Corporation (NERC) compliance requirements
- Ability to design electrical power facilities; troubleshoot electrical systems, control systems, and project problems
- Ability to demonstrate highly developed analytical and technical skills in electric utility engineering and operational analysis; provide technical supervision of staff
- · Ability to create and revise documents or reports utilizing computer technology

Education, Experience and Special Requirements:

- Typical education would include a Bachelor of Science Degree in Electrical Engineering from an accredited college, or university, or equivalent.
- Typical experience would include five years relevant electrical engineering experience with preference for electric utility engineering including distribution, transmission, substation design and/or construction experience.
- Professional registration in Electrical Engineering in the State of California, or in another state that has reciprocity with California, and must obtain California registration within one year of employment.
- Possession of the appropriate California driver's license, or the ability to acquire one within ten days of appointment.

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Electric Utility Engineer

- Knowledge of utility engineering, including short circuit, load flow, voltage drop, metering, substation design standards
- · Knowledge of load forecasting, loss and economic evaluation
- Knowledge of power generation operations or maintenance
- Knowledge of regulatory compliance in air emissions, water quality, waste handling, hazardous materials handling, safety and health
- · Knowledge of DOT pipeline or NERC reliability standards
- Knowledge of SCADA, energy accounting, distribution control systems, cyber security and secure IP routing, data communication systems administration and support
- Knowledge of underground and site design principles and standards
- · Ability to evaluate and implement government regulations and industry standards
- Ability to troubleshoot a variety of technical problems in assigned field, this could include operational, maintenance, electrical systems, control systems, data communication networks, project management issues, etc

Education, Experience and Special Requirements:

- Documented completion of a state-recognized course of instruction for attaining specialized knowledge and skills providing the required knowledge, skills, and abilities is qualifying.
- Typical education would include a Bachelor's degree in an engineering discipline from an
 accredited college, university, or equivalent.
- Typical experience would include three years relevant experience in distribution, operation, construction, power generation, regulatory compliance, environmental regulatory compliance, control systems administration and support, industrial process engineering, and/or project management.
- Possession of the appropriate valid California driver's license or the ability to acquire one
 within ten days of appointment.

Click Here for the full list of Qualifications

WHAT TO EXPECT FROM THE APPLICATION AND EXAM PROCESS:

You will receive notifications pertaining to this recruitment at the e-mail address and text message number provided on your application. Email correspondence may go to your spam or junk mail folder.

Examination Process: An oral board interview will be administered and is tentatively scheduled of 06/06/2022. This recruitment will establish an eligibility list that may be used to fill future vacancies.

Selection Process: Final appointment is contingent upon:

Positive past employment references

- · Passing a city paid fingerprint criminal conviction check
- Passing of a pre-employment medical exam and drug and alcohol screening test

Veteran's Credit: Applicants who attach a copy of the DD-214 to their application indicating "Honorable Discharge" from military service and receive a passing score on the examination process will have two (2) additional points added to their final examination score.

The City of Redding adheres to Cal/OSHA COVID-19 requirements.

AN EQUAL OPPORTUNITY/FEDERAL AFFIRMATIVE ACTION EMPLOYER

APPLICATIONS MAY BE FILED ONLINE AT: http://www.cityofredding.org

Position #108E 853 042022 ELECTRICAL ENGINEER/ELECTRIC UTILITY ENGINEER

777 Cypress Avenue Redding, CA 96001 (530) 225-4065

personnel@cityofredding.org

Electrical Engineer/Electric Utility Engineer Supplemental Questionnaire

- * 1. Describe your experience in the design and specification of electrical substations including protective relaying. Please list/describe the projects on which you have worked, and indicate your role in the project. If none, please type N/A.
- * 2. Describe your experience in the area of transmission/distribution system planning and load forecasting. Describe any experience in transmission/distribution system modeling, preparing voltage profiles, or short-circuit studies. If none, please type N/A.
- * 3. Describe your experience in the area of transmission/distribution line design and construction. Describe projects you have worked on and your role in the projects. If none, please type N/A.
- * 4. Describe your experience working with personal computers and the software with which you are most familiar. Specify any power flow or short-circuit software programs with which you are familiar. If none, please type N/A.
- * 5. Describe any experience you have in the inspection, administration, or management of electric utility consulting contracts, service or procurement contracts, or construction contracts (especially related to Public Works construction). If none, please type N/A.
- * 6. Describe your experience in developing electrical utility engineering, design, and construction standards. List any Federal regulatory filing experience, if any. If none, please type N/A.
- * 7. Describe any other areas of utility experience or expertise you have that you feel would be valuable to the Electric Utility. Describe any power production experience and/or experience with design and implementation of power plant distributed control systems, if any. If none, please type N/A.

* 8. Describe your experience in designing, implementing and/or analyzing transmission, generation and distribution protective relaying schemes. If none, please type N/A.

* Required Question