



CITY OF SANTA CLARA
invites applications for the position of:

Senior Electric Utility Engineer- Control/Communications

SALARY: \$85.79 - \$109.46 Hourly
\$14,869.91 - \$18,973.56 Monthly
\$178,438.92 - \$227,682.72 Annually

OPENING DATE: 06/06/22

CLOSING DATE: 06/24/22 04:00 PM

EXAM WEIGHT: 100% Oral, Qualifying Supplemental

TENTATIVE EXAM INFORMATION:

DESCRIPTION:

The Department

Silicon Valley Power (SVP) currently provides over 40 percent of Santa Clara's electricity from carbon-free renewable resources. In addition to using green energy from large-scale wind, solar, geothermal and hydroelectric projects outside of the area, SVP employs innovative ways to locally produce electricity by capturing and burning methane gas from a closed city landfill and using power from solar generating systems on city-owned garages and vacant, unusable land. It is the mission of Silicon Valley Power to be a progressive, service-oriented utility, offering reliable, competitively priced services for the benefit of Santa Clara and its customers. Being competitive in the marketplace with a continuous focus on customer service, SVP can provide economic value to the City of Santa Clara and its customers while maintaining low residential rates and offering competitive rates for all customers.

The Position

SVP is seeking a dynamic and innovative Senior Electric Utility Engineer in the Utility Operations division. This individual will lead control system and communications system projects that support the mission of the Utility. The individual shall provide leadership in the Operations Technology domain for the development of high quality, consistently available, secure, and fault-tolerant SCADA and tele-protection network architecture. This individual should be an experienced, self-starter that can identify and implement projects that are necessary to support load growth and improve reliability of the electric system with little oversight. This position requires hands-on working knowledge of fiber optic multiplexer systems, control systems, protection systems, and cybersecurity systems. This position supports day-to-day utility operations and Compliance. This position will contribute to developing engineering standards and processes, and manage projects as assigned.

An incumbent in this position will be assigned engineering work associated with the design, construction, operation, and maintenance of control and communication facilities of the Electric Utility Department. Other electric utility engineering work may be assigned as necessary, including the responsibilities of other Senior Electric Utility Engineer classifications.

This recruitment may be used to fill multiple positions in this, or other divisions or departments. If you are interested in employment in this classification, you should apply to ensure you are considered for additional opportunities that may utilize the applicants from this recruitment.

TYPICAL DUTIES:

Duties may include but are not limited to the following:

Under general direction:

- Plans, directs, coordinates, performs (or assists in the performance), and supports the planning, licensing, design, analysis, study, construction, equipment installation, regulatory compliance, operation, and maintenance of the electric utility control and communication facilities, including: Supervisory Control And Data Acquisition (SCADA), Local and Wide Area Networks (LAN & WAN) and various other computer and control devices utilized in the Department's generation, substation, transmission and distribution, and other associated facilities;
- Prepares, conducts, analyzes, and assists in testing control and communication equipment and systems for the City Electric Utility;
- Directs, prepares, or assists in the preparation of standards, layout and construction drawings, equipment specifications, and design procedures;
- Formulates, prepares, or directs preparation and recommends general operating procedures, guidelines, and operating manuals for control and communication facilities;
- Prepares or directs the preparation of necessary reports;
- Provides customer assistance and information to other City Departments on technical matters relevant to electric utility operation;
- May act as resident engineer during project construction, major maintenance activities or significant studies/projects of a similar nature;
- May direct preparation of, or prepare, input for departmental budget; and
- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

Graduation from an accredited college or university with: a) Bachelor's Degree in Electrical Engineering and three (3) years' experience in electric utility engineering work or b) a Bachelor's Degree in Engineering and four (4) years' experience doing electric utility engineering work or ten (10) years' experience doing electric utility engineering work and satisfactory completion of a qualifying written examination.

Acceptable Substitution:

A Master's Degree in electrical, mechanical, or civil engineering from an accredited college may be substituted for one year of experience. Candidates from a non-accredited college or university must demonstrate equivalency. Registration as a professional electrical, mechanical, or civil engineer in the State of California may be substituted for accreditation equivalency.

LICENSE

Possession of a valid California Driver's license.

SPECIAL CONDITIONS & OTHER REQUIREMENTS

- Prior to hire, candidates will be required to successfully pass a pre-employment background check, which may include employment verification, a DMV record check, a criminal history check, and Department of Justice (DOJ) fingerprinting. Any information obtained will be used to determine eligibility for employment in accordance with the law. A conviction will not necessarily disqualify an applicant from appointment, however, failure to disclose a conviction when required will result in disqualification from the recruitment process.
- A medical examination may be required prior to appointment
- May work unusual hours in emergency situations, or while acting as duty supervisor outside regular working hours, or at other than regular job site

PROMOTIONAL POINTS

Permanent City employees who receive a passing score on the examination process will have five (5) promotional points added to their final score.

Meeting the minimum qualifications does not guarantee admittance into the examination process. Only the most qualified candidates who demonstrate the best combination of qualifications in relation to the requirements and duties of the position will be invited to test. Candidates must attain a passing score on each phase of the examination process to qualify for the Eligible List. A department interview will be required prior to appointment.

Federal law requires all employees to provide verification of their eligibility to work in this country. Please be informed that the City of Santa Clara will not sponsor, represent, or sign documents related to visa applications/transfers for H1B or any other type of visa which requires an employer application.

KNOWLEDGE, SKILLS, AND ABILITIES:**KNOWLEDGE, SKILLS, AND ABILITIES:**

Thorough knowledge of the theory and practice of electric utility control and communication engineering.

Knowledge of:

- Theory of electric utility operation (i.e. generation, transmission and distribution of three phase alternating current power)
- Principles of supervision and personnel administration
- Working understanding and familiarity with the engineering principles, practices, procedures, materials, and equipment used in the planning, design, cost estimation, technical and economic analysis, construction, operation, repair and maintenance of electric utility generation, substation, transmission, distribution, metering, and demand-side facilities

Ability to:

- Understand and follow oral and written instructions; Analyze engineering problems, perform calculations, and report solutions
- Effectively interface with the general public including customers and other City employees

Additional Information:

You must answer all job-specific questions in order to be considered for this vacancy or your application will be deemed incomplete and withheld from further consideration. Applications must be filled out completely (i.e. do not write "see resume or personnel file.") To receive consideration for the screening process, candidates must submit a resume. Incomplete applications will not be accepted. Application packets may be submitted online through the "Apply Now" feature on the job announcement at www.santaclaraca.gov. Applications must be submitted by the filing deadline of June 24, 2022 at 4:00 PM.

The City of Santa Clara is an equal opportunity employer. Applicants for all job openings will be considered without regard to age, race, color, religion, sex, national origin, sexual orientation, disability, veteran status or any other consideration made unlawful under any federal, state or local laws. The City of Santa Clara is committed to offering reasonable accommodations to job applicants with disabilities. If you need assistance or an accommodation due to a disability, please contact us at (408) 615-2080 or HumanResources@santaclaraca.gov

<http://www.santaclaraca.gov>

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Santa Clara, CA 95050
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SENIOR ELECTRIC UTILITY ENGINEER-
CONTROL/COMMUNICATIONS
JM

humanresources@santaclaraca.gov

Equal Opportunity Employer

Senior Electric Utility Engineer-Control/Communications Supplemental Questionnaire

- * 1. Select the option that best describes how you meet the minimum qualifications:
 - A Bachelor's Degree in Electrical Engineering from an accredited college or university and three (3) years' experience in electric utility engineering work
 - A Bachelor's Degree in Engineering from an accredited college or university and four (4) years' experience doing electric utility engineering work
 - Ten (10) years' experience doing electric utility engineering work
 - A Master's degree in electrical, mechanical, or civil engineering from an accredited college and two (2) years experience in electric utility engineering work
 - I do not meet the minimum qualifications
- * 2. Describe your experience in electric utility engineering work, where you obtained this experience, and how long you performed these duties.

- * 3. Do you possess a valid California Driver's license?
 - I possess a valid CA driver's license
 - I do not possess a valid CA driver's license, but have the ability to obtain one by employment
- * 4. Please describe your experience designing, constructing, commissioning, and troubleshooting control systems and communications systems citing specific projects you have completed and specific equipment you have worked with.

- * 5. Please describe your experience programming and commissioning control and communication systems including fiber optic multiplexer, PLC, DCS, and RTU.

- * 6. Please describe your experience with LAN/WAN and cybersecurity systems. Discuss any standards and special considerations you have applied.

- * 7. Please describe your experience applying industry standard communication protocols (DNP3, Modbus TCP/RTU, IEC 61850, Mirrored Bits, etc.)

- * 8. Please describe your Project Management experience.

- * Required Question