



City of Santa Clara Electric Utility Engineer

SALARY	\$79.42 - \$101.28 Hourly \$13,765.71 - \$17,554.56 Monthly \$165,188.52 - \$210,654.72 Annually	LOCATION	Santa Clara, CA
JOB TYPE	Full-Time	JOB NUMBER	49-23-428
DEPARTMENT	Electric Utility	OPENING DATE	05/31/2023
CLOSING DATE	6/30/2023 4:00 PM Pacific		

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 SVP 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 Electric Utility Engineer to fill vacancies in the Customer Development and Project Management Division to support in engineering and planning of their electric system.

For the Customer Development and Project Management Division, the first position will assist in maintaining the electric system model, participate in SVP distribution system planning, identify and implement projects to support load growth and improve reliability of the electric system, perform distribution system protection, control and automation, perform generator interconnection studies and implement in the field. This position will also perform plan reviews and other assignments as assigned per need of the department. This position will contribute to developing engineering standards and processes, and manage projects as assigned. Experience using electrical engineering analysis software to complete load flows, short circuit, coordination, and arc flash studies is desirable.

For the Customer Development and Project Management Division, the second position will assist with the implementation of a portfolio of projects that can include new substations, new 60kV, 115kV, and 230kV transmission lines, reconstruction and/or expansion of existing substations and transmission lines. The ideal candidate should be a self-starter who can thrive in both an autonomous and team environment. This position requires project management skills, including but not limited to initiating, planning, executing, monitoring, and closeout of projects. A working knowledge of how electric utility systems work, and the work resources required to design, bid, construct, and commission these systems is desirable. This individual

will assist with scheduling, budgeting, preparing bid packages, working with teams of subject matter experts, tracking all financial aspects of projects through ongoing job forecasting, oversee preconstruction meetings, coordinate factory acceptance testing of equipment, manage RFIs, change orders, and invoicing.

An incumbent in this position may be assigned to work in the generation, substations, Capital improvement Project, transmission, distribution, planning, protection, or operations groups of the Electric Utility Department, as the need is determined.

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:

- Designs, assists in coordinating the design of, and manages electric utility system projects, including: generation facilities, electric substations, protection systems, overhead and underground transmission and distribution lines, supervisory control facilities, street lighting, and other electric system facilities
- Prepares and/or assists in the preparation of design and construction standards, equipment procurement specifications, construction specifications and drawings, design procedures, test procedures, and safety procedures for electric facilities
- Performs and/or assists in power system studies such as protective coordination, fault studies, power flows, service reliability, and power quality
- Uses AutoCAD in the preparation of drawings, plans and other related matters
- Prepares, supervises, or assists in the preparation and maintenance of circuit maps, diagrams, construction drawings, charts, and plans
- Compiles engineering data and makes complex engineering calculations and analysis
- Monitors utility compliance with State and Federal regulations, makes recommendations and may develop and implement procedures for compliance
- Investigate field problems and troubleshoot problems with utility equipment and facilities
- May provide assistance to all classes of customers, developers, the utility business office, and to other City Departments on technical matters relevant to electric utility services
- May provide assistance to technical and financial inputs for projects in electric utility budget
- Prepares contracts, agreements, technical specifications, reports, minutes and other related documents
- May assist with the preparation of department's annual and five-year capital improvement budgets and the operating budget
- Coordinates engineering activities with other City departments and other public agencies
- May supervise, train and develop staff and act as supervisor during periods outside of regular working hours during emergency situations or while on local or remote job construction sites; and
- Performs other related duties as assigned

Minimum Qualifications

Education and Experience:

- Graduation from an accredited college or university with:
 - a) Bachelor's Degree in Electrical Engineering and two (2) years experience doing electric utility engineering work, or
 - b) Bachelor's Degree in Engineering and three (3) years experience doing electric utility engineering work and
- Experience using AutoCAD and Microsoft office (i.e. Microsoft Word, Excel, PowerPoint and Matlab)

Acceptable Substitutions:

- A Master's Degree in Electrical Engineering from an accredited college or university may be substituted for one (1) year of experience
- An Engineer-in-Training Certification with ten (10) years of experience in electric utility engineering work can be substituted for the degree in engineering and the required experience indicated above

License/Certifications:

Possession of an appropriate, valid Class C California driver's license is required at time of appointment and for the duration of employment.

Desirable Qualifications:

- Registration as an Electrical, Mechanical or Civil Engineer in the State of California
- Experience using ESRI based Geographic Information System (GIS)
- Experience using system modeling and load flow software; Aspen one-liner software, GE PSLF, and DEW/ISM

Other Requirements:

Must be able to perform all of the essential functions of the job assignment.

Special Conditions:

May work unusual hours in emergency situations, or while acting as supervisor, or at other than the regular job site.

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.

PERMANENT CITY EMPLOYEES PREFERENCE POINTS: Current permanent employee candidates who receive a passing score on the examination will have an additional five (5) points added to their final score.

Knowledge, Skills, and AbilitiesKnowledge of:

- Engineering principles, practices, procedures, materials, and equipment used in the design, cost estimation, analysis, construction, operation, repair and maintenance of electric utility generation, substations, transmission, distribution, protection, street lighting, metering, and other electric utility facilities
- Principles and theory of electric utility design, construction, operation and maintenance (i.e., power generation, transmission, and distribution systems)
- Federal, State and local laws, codes, ordinances, regulations and policies pertaining to power infrastructure operation
- Utility system modeling techniques and technology
- Principles of supervision and training
- Computer applications (e.g. Microsoft office, project management software, scheduling tools, computer-aided drafting and design CAD and Matlab)

- Environmental and safety practices, procedures and standards, including the National Electric Safety Code (NESC) and other standards

Ability to:

- Understand and follow oral and written instructions
- Analyze engineering problems of moderate complexity
- Analyze data, prepare reports and make recommendations
- Perform electric utility power engineering work related to planning, design, and operation of distribution, transmission, or substation systems
- Communicate effectively both verbally and in writing
- Write clear, concise reports, using correct composition, English grammar and spelling
- Deal tactfully and courteously with others
- Work in a team based environment to resolve problems, achieve common goals and successfully deliver projects
- Establish and maintain effective working relationships with those contacted in the course of work, including the general public
- Handle multiple priorities, organize workload, and meet strict deadlines
- Walk or stand for extended periods of time
- Bend, stoop, reach, carry, crawl, climb, and lift as necessary to perform assigned duties

Supervision Received

Works under the general direction of a Senior Electric Engineer, Division Manager, Assistant Director or other supervisor as assigned.

Supervision Exercised

May supervise engineering administrative, technical, or other staff as assigned.

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 **1) Cover Letter and, 2) 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 30, 2023, 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.

Agency

City of Santa Clara

Address

1500 Warburton Ave.

Santa Clara, California, 95050

Phone

408-615-2080

Website

<http://www.santaclaraca.gov>

Electric Utility Engineer Supplemental Questionnaire

*QUESTION 1

Please select how you meet the minimum qualifications:

- I possess a Bachelor's Degree from an accredited college or university in Electrical Engineering and two (2) years experience doing electric utility engineering work.
- I possess a Bachelor's Degree from an accredited college or university in Engineering and three (3) years experience doing electric utility engineering work, with experience using AutoCAD and Microsoft office (i.e. Microsoft Word, Excel, PowerPoint and Math lab).
- I possess a Master's Degree in Electrical Engineering from an accredited college or university in Engineering and one (1) year experience doing electric utility engineering work.
- I possess a Master's Degree in Electrical Engineering from an accredited college or university in Engineering and two (2) years experience doing electric utility engineering work, with experience using AutoCAD and Microsoft office (i.e. Microsoft Word, Excel, PowerPoint and Math lab).
- I possess an Engineer-in-Training Certification with ten (10) years of experience in electric utility engineering work.
- I do not meet the minimum qualifications.

*QUESTION 2

Describe your years of experience doing electric utility engineering work. Include in your response where you obtained this experience and duties performed.

*QUESTION 3

Please select the specialty in which you have a PE license in California:

- Electrical
- Mechanical
- Civil Engineer
- Other
- Engineer-in-Training Certification
- PE license in progress
- I do not possess any of the above

*QUESTION 4

Please select all that apply:

- I have experience using electrical engineering analysis software to complete short circuit, coordination, and arc flash studies (list specific software).
- I have experience using system modeling and load flow software; DEW/ISM, Aspen one-liner software, GE PSLF, and ETAP.
- I do not possess any of the above.

*QUESTION 5

If you have experience using electrical engineering analysis software to complete short circuit coordination, and arc flash studies, list the specific software. If not, please indicate N/A.

***QUESTION 6**

Are you able to work unusual hours in emergency situations, or while acting as supervisor, or at other than the regular job site.

Yes

No

***QUESTION 7**

Please describe any experience you may have in performing electric system studies for an electric utility transmission and/or distribution system. Include in your answers software tools you used and the process used to perform the studies.

***QUESTION 8**

Please describe your experience with protection and control systems, substation engineering, cost estimating and/or troubleshooting of transmission and distribution projects.

***QUESTION 9**

Please describe any other electric utility experience you have in the following areas: a) Protection Engineering, b) Transmission & Distribution Design & Construction, c) Transmission & Distribution System Operation & Maintenance, d) Substation Design & Construction, e) SCADA, Telecommunications Engineering & Operations

* Required Question