

Associate Engineer (Electrical) - Community Energy Department - (2100251) About the Department

To help accomplish its goal of being both innovative and environmentally responsible, the City of San José created the Community Energy Department in August 2017, to administer San Jose Clean Energy, the City's brand-new Community Choice Energy (CCE) program. The mission of the Community Energy Department is to reduce Citywide greenhouse gas emissions, lower energy rates, and provide our community with a choice of energy providers, in addition to providing transparency, accountability, and outstanding customer service.

For more information about the Community Energy Department, please visit: https://www.sanjosecleanenergy.org

Positions & Duties

Please note that applications are currently not accepted through CalOpps or any other third-party job board application system. To apply, applicants must complete an application via the City of San Jose's website at www.sanjoseca.gov/citycareers.

The actual salary shall be determined by the final candidate's qualifications and experience. In addition to the starting salary, employees in the Associate Engineer classification shall also receive an approximate five percent (5%) ongoing non-pensionable compensation pay.

Salary Range: \$96,470.40 - \$122,137.60

The Community Energy Department is seeking an **Associate Electrical Engineer** to support an emerging program which is intended to increase the City's overall energy resiliency. This newly formed Associate Electrical Engineer position will collaborate with staff from other departments, consultants, vendors, private developers, and other partners to identify, assess, develop and

deliver innovative energy resiliency projects, including participating in the potential development of a City utility to provide electric distribution service to a large development project.

The Associate Electrical Engineer will perform a diverse set of professional electrical engineering-related assignments which are primarily focused on the engineering, design, and implementation of electric distribution microgrids, distributed energy resources, and other electrical projects within new residential, commercial and other land-use developments, as well as Cityowned facilities. The person selected will have knowledge and experience related to the design, construction and operation of high voltage electric transmission and distribution systems, building and other facility electrical systems, and renewable energy generation and storage solutions. Knowledge and experience related to the design and operation of component-level or integrated electronic circuitry is not applicable to this position.

Knowledge and experience in the following specific areas is directly relevant to this Associate Electrical Engineer position: Experience in electrical power system and microgrid design, including transmission, distribution, generation and storage. Knowledge of electrical power transmission and distribution equipment and operation comprised of 115KV, 21KV, 12KV, 4.16KV and 480V switchgears, substations, breakers, switchboards, panel boards, UPS, generators, substation equipment, and SCADA. Knowledge of designs for equipment installation, underground duct banks, conduit and other raceway systems, power and control cables and grounding. Knowledge of building and facility electric distribution, metering and power backup systems and equipment. Knowledge of renewable energy devices such as wind and solar generators and storage batteries. Knowledge of distributed energy resource systems implementation and management. Knowledge of federal and state electric energy laws, regulations, and procedures. Knowledge of PG&E tariffs, interconnection processes, system impact and facility studies, and transmission and distribution services and operations. Familiarity with the principles and practices of project and construction management. Ability to exercise professional level judgment in the application of codes and standards expressed in the California Code of Regulation Title 24, PG&E Greenbook, Institute of Electronic and Electrical Engineers (IEEE), American National Standards Association (ANSI), National Electric Code (NEC), Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), California Mechanical Code (CMC), the California Plumbing Code (CPC), The California Energy Code (CEC), the National Fire Protection Code (NFPA), and will be familiar with the California Building Code (CBC), the California Fire Code (CFC).

Key responsibilities of the position include but are not limited to the following:

- Manage projects and programs, i.e., oversee, control, and guide the project or program.
- Perform technical electrical engineering and design functions.
- Negotiate, prepare and manage professional consultant agreements and service orders.
- Coordinate and/or oversee the work of other City staff and consultants.
- Prepare clearly written and effective reports and presentations.
- Maintain effective relationships and interactions with others, including City staff, consultants, developers and the public.
- Maintain a constructive attitude and be motivated to have a positive impact on the City.

Specific duties of the position include, but are not limited to the following:

- Plan, coordinate and/or manage energy resiliency projects and programs that may involve multiple participants, including other City staff and departments, consultants, private developers, and community stakeholders.
- Plan, implement and manage consultant delivered services and projects, including negotiating, reviewing and/or preparing scopes of work, budgets, schedules, service orders, change orders, and invoices.

- Define, prioritize, and assign the work tasks of other staff and consultants, and regularly review progress and make necessary adjustments to ensure satisfactory performance of the work.
- Prepare, review and/or analyze designs, improvement plans, specifications, and other engineering documents for a variety of electrical systems, including but not limited to electric power transmission, distribution, generation, and storage.
- Perform and/or review various electrical engineering calculations and analysis related to electrical and energy systems capacity, operation and performance.
- Review and/or analyze power transmission and distribution studies and reports, including by not limited to PG&E System Impact Studies and PG&E Facilities Studies.
- Research, analyze and or/evaluate emerging electrical and renewable energy technologies and programs; prepare and/or review technical reports, studies, white papers and presentations related to energy resiliency strategies.
- Prepare and/or review documents and specifications used to procure professional consulting services, products or equipment, and other items needed to implement electrical systems and energy resiliency projects.
- Prepare written reports and presentations as the basis for important discussions, requests, actions, and approvals by internal and external stakeholders, including City Management, City Council, other City departments, developers, and community groups.
- Provide accurate, timely and appropriate verbal and/or written responses to stakeholder requests, questions or concerns.

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.

COMPETENCIES:

The ideal candidate will possess the following competencies, as demonstrated in past and current employment history. Desirable competencies for this position include:

Job Expertise: demonstrates knowledge of and experience with applicable professional/technical principles and practices, Citywide and departmental procedures/policies and federal and state rules and regulations.

Project Management: Ensures support for projects and implements agency goals and strategic objectives.

Analytical Thinking: Approaches a problem or situation by using a logical, systematic, sequential approach.

Team Work & Interpersonal Skills: Develops effective relationships with co-workers and supervisors by helping others accomplish tasks and using collaboration and conflict resolution skills.

Computer Skills: experienced with common business computer applications including but not limited to: MS Outlook, MS Word, MS PowerPoint, MS Access, and MS Excel. Proficient with AutoCAD.

Communication Skills: Effectively conveys information and expresses thoughts and facts clearly, orally and in writing; demonstrates effective use of listening skills; displays openness to other people's ideas and thoughts.

Qualifications

MINIMUM QUALIFICATIONS:

Education: Bachelor's degree from an accredited college or university in the required professional <u>Electrical</u> engineering discipline or possession of an Engineer-in-Training (EIT) certificate.

Experience: Three (3) years of increasingly responsible professional <u>Electrical</u> engineering experience.

Acceptable Substitution: A Master's degree from an accredited college or university in the required professional engineering discipline may be substituted for one (1) year of professional engineering experience.

Licenses or Certificates:

- Possession of a valid professional registration with the State of California as an <u>Electrical Engineer</u>.
- Possession of a valid driver's license in the State of California.

Employment Eligibility: Federal law requires all employees to provide verification of their eligibility to work in this country. Please be informed that the City of San Jose will NOT sponsor, represent, or sign any documents related to visa applications/transfers for H1-B or any other type of visa which requires an employer application.

SELECTION PROCESS:

The selection process will consist of an evaluation of the applicant's training and experience based on the application, resume and answers to the job-specific questions. You must answer all job-specific questions pertaining to each job you are applying for and complete the Education/Work History section of the application in order to be considered for this vacancy or your application will be deemed incomplete and withheld from further consideration.

The recruitment may include a written exam and/or practical exercise. Only those candidates whose backgrounds best match the positions and pass the written exam and/or practical exercise will be forwarded to the interview phase of the selection process.

You will be prompted to answer the following job-specific questions (IN DETAIL) during the online application process. Please note that there is a <u>4,000-character limit</u>, including spaces, for each text response.

- Please describe (in detail) your sufficient experience to successfully perform the essential duties of the job. Please include your job title, job duties, employer(s), and number of years at each. Your experience should be consistent with your employment history.
- Indicate if you possess a registered Professional Electrical Engineer in the State of California. Include the type of license and expiration date.
- Briefly describe your professional experience in electrical power system and/or renewable/distributed energy resources (microgrid) engineering and design. Include when and where you attained your experience, and your roles and responsibilities.
- Describe your experience in project management. A complex project that included multiple participants and stakeholders is ideal. Include your approach to coordinating and managing the work toward a common goal. Give an example of the most difficult challenge you encountered and your experience dealing with it.

- If you have experience related to applying for, designing, engineering, studying, negotiating, or establishing transmission or distribution level interconnections to an electric utility system, such as PG&E, briefly describe your experience. Include when and where you attained your experience, and your roles and responsibilities.
- Please describe your level of expertise working with common business computer application including but not limited to MS Outlook, MS Word, MS PowerPoint, MS Access, and MS Excel. Please include details on how you have used the applications.

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.

If you have questions about the duties of these positions, the selection or hiring processes, please contact Michelle Saechao at Michelle.Saechao@sanjoseca.gov

Additional Information

To apply, please complete an application via the City of San José's website at www.sanjoseca.gov/citycareers. This position is open until filled. Interested applicants are strongly encouraged to apply by April 21, 2020 at 11:59 PM to be considered as part of the first-round application review. Please allow adequate time to complete the application and submit before the deadline or the system may not save your application. If your online application was successfully submitted, you will receive an automatic confirmation email to the email address you provided. IF YOU DO NOT RECEIVE THE CONFIRMATION, please email CityCareers@sanjoseca.gov and we will research the status of your application. Please contact Human Resources at (408) 535-1285, or Human.Resources@sanjoseca.gov if you have any questions.

Please visit our <u>Benefits page</u> and <u>Human Resources Department website</u> to learn more. The City of San José is an equal opportunity employer.

Job Engineering Architectural
Schedule Full-time
Employee Status Regular
Job Type Standard
Posting Date Apr 1, 2021
Minimum Salary 96,470.40
Maximum Salary 122,137.60
Bargaining Unit 1: Association of Engineers and Architects