City of Pasadena

Associate Electrical Engineer (Substation, Protection, Automation & SCADA)

SALARY	$52.91 - $66.14 Hourly $9,171.25 - $11,464.00 Monthly $110,055.00 - $137,568.00 Annually	**LOCATION**	City of Pasadena, CA
JOB TYPE	Full -Time	**JOB NUMBER**	24-099
DEPARTMENT	Water & Power	**OPENING DATE**	11/30/2023
CLOSING DATE	12/28/2023 11:59 PM Pacific		

Pasadena Water & Power is seeking a qualified Associate Electrical Engineer to supervise the staff and projects assigned to the Substation, Protection, Automation, and SCADA engineering section of the Power Delivery Division.

Ideal Candidate

An ideal candidate in the position of Associate Electrical Engineer will perform journey-level/supervisory work. Incumbents require an Engineer-In-Training (EIT) Certificate and are responsible for carrying out assigned electrical system capital improvement designs, construction and maintenance projects. Incumbents perform routine to difficult professional engineering work requiring professional training and experience. Incumbents may also be responsible for supervising the work of assigned technical staff. Assignments are project-focused, requiring the exercise of judgment and initiative within the parameters of department policies and procedures.

Associate Electrical Engineer is distinguished from Electrical Engineer in that incumbents in the latter class are expected to perform the most complex professional electrical engineering work, requiring professional registration and a greater degree of engineering experience.

Essential Functions

The major responsibilities of this position are listed below. For more detailed information, please review the Associate Electrical Engineer job description.

- Participates in Requests for Proposals and Bids for substation design and/or construction projects, including bid evaluations, selection of successful bidders and preparation of agenda reports, presentations, and other materials for approval; reviews contract documents; supports administration of contracts including review of change orders and amendments to agreements; prepares or reviews regular project status reports to department management; participate in resolving questions/issues from construction inspectors and field staff; and ensures accurate documentation of as-built facilities and systems.
- Perform substation protection, planning, and studies; utilizes electrical system engineering software and tools to evaluate substation and transmission system conditions and recommends improvement plans; conducts long range planning studies; analyzes protection system coordination, analyzes electrical outages and recommends mitigating actions to improve system reliability, operation, and sustainability.

- Participates in development and management of substation capital improvement program including development of economical, prioritized design projects to address system upgrades and improvements, major system maintenance and new regulatory compliance requirements; determines the technical and economic feasibility of projects; directs the development of engineering designs, plans, specifications and estimates for substation capital improvement projects; manages project cost estimates, and budgets.
- Perform complex substation protection, control, automation, and communication designs including, but not limited to equipment installations/replacements and capital improvement projects featuring engineering construction drawings, detailed electrical schematics and wiring diagrams, equipment bills of material, cable schedules, control logic, automation maps, substation concentrator programming, field testing, commissioning, and interface to SCADA system.
- May schedule, supervise and evaluate the work of staff; develops unit work plans to achieve assigned objectives; may participate in interviewing and selecting new engineering staff.
- Trains subordinates in a wide variety of tasks.
- Prepares a variety of correspondence and reports on technical engineering issues.
- Regular attendance is an essential function of this classification.

Qualification Guidelines

The following list represents the core competencies needed for success in this position.

Attention to Detail - Focusing on the details of work content, work steps, and final work products
Oral Communication - Engaging effectively in dialogue
Writing - Communicating effectively in writing
Relationship Building - Establishing rapport and maintaining mutually productive relationships
Project Management - Ensuring that projects are on-time, on budget, and achieve their objectives
Teamwork-Collaborating with others to achieve shared goals
Analyzing & Interpreting Data - Drawing meaning and conclusions from quantitative or qualitative data
Using Technology - Working with electronic hardware and software applications.

EDUCATION AND EXPERIENCE:

- Graduation from an accredited four-year college or university with a major in electrical engineering or a related engineering discipline
- At least two years of progressively responsible electrical engineering experience at the level of Assistant Electrical Engineer; or an equivalent combination of training and experience.
- An Engineer-in-Training certificate issued by the California State Licensing Board.

Special Requirements

Selection Process

Applicants who appear best qualified based on their application submitted will be invited to any combination of written, performance or oral appraisal to further evaluate their job-related experience, education, knowledge, skills and abilities.

Probationary work test period is one year.

Vacancies

There is currently one vacancy in the Power Delivery division of the Pasadena Water and Power Department.

Agency

City of Pasadena

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Phone
(626) 744-4366
(626) 744-4366

Website
http://www.cityofpasadena.net/humanresources

Associate Electrical Engineer (Substation, Protection, Automation & SCADA) Supplemental Questionnaire

*QUESTION 1

Do you possess an Engineer-in-Training Certificate?

- ◯ Yes
- ◯ No

*QUESTION 2

Select the option that best describes your years of progressively responsible electric substation engineering experience at entry level or higher.

- ◯ No experience
- ◯ At least 1 year
- ◯ At least 2 years
- ◯ At least 3 years
- ◯ More than 4 years

*QUESTION 3

Select the option that describes your years of progressively responsible electric substation project management experience at entry level or higher.

- ◯ No experience
- ◯ At least 1 year
- ◯ At least 2 years
- ◯ At least 3 years
- ◯ More than 4 years

*QUESTION 4

Do you have experience coordinating and setting substation protection relays? If yes, briefly describe your specific role in project, types of devices relays coordinated, and software utilized. If no, please indicate "N/A".

*QUESTION 5

Do you have experience with capital improvement upgrades of medium voltage substations? If yes, briefly describe your specific role in project, voltage ratings of substations, capacity rating of transformers, types of circuit breakers, and protection relays utilized. If no, please indicate "N/A".

*QUESTION 6

Do you have experience creating engineering construction three-lines, schematics, bills of materials, cable schedules, and wiring diagram drawings for substation upgrades? If yes, briefly describe your role in project, software utilized, involvement during construction phase, and how as-built drawings were captured. If no, please indicate "N/A".

*QUESTION 7

Do you have experience interfacing substation devices to a Supervisory Control and Data Acquisition (SCADA) system? If yes, briefly describe your specific role in project, types of devices interfaced, protocols utilized, type(s) of substation concentrator, and SCADA software vendor. If no, please indicate "N/A."

* Required Question