JOB POSTING

TITLE: Electric and Controls Engineering Assistant

SECTION: Urban Water

DEPARTMENT: Engineering

SRN 39: $4347-$5224

REPORTING RELATIONSHIP:

Reports to: Principal Sanitation Engineer

Supervises the following: None

DEFINITION: Under general supervision, designs and reviews electric and control systems, plans, specifications, shop drawings and inspects installations for use in wastewater treatment plants, lift stations, domestic water well sites, booster stations, reservoirs, irrigation distribution controls and similar facilities as required for collection, treatment and recycling of wastewater and production, storage and distribution of domestic and irrigation water.

ESSENTIAL FUNCTIONS:

1. Performs engineering planning, design and review for electric and control components of capital improvement projects.

2. Prepare or coordinate the preparation of plans and specifications for the construction and installation of electric and controls systems utilized in a variety of water and wastewater facilities.

3. Review or coordinate the review of plans, specifications, shop drawings, construction and installation of electric and controls systems utilized in a variety of water and wastewater facilities.

4. Research and identify standardized project design requirements utilizing appropriate technological innovations and advances.

5. Conduct computer modeling of electric and controls systems.

6. Analyze and determine utility power and generator capacity requirements using sound engineering principles for existing and proposed facilities.

7. Provide expertise as a resource to district project engineers for capital improvement projects and to district electricians and control technicians for operation and maintenance of existing facilities.

8. Allied functions related to implementation, utilization and optimization of district electric and controls systems.
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**MINIMUM QUALIFICATIONS:**

License or Certificate: Valid Vehicle Operator’s License issued by the state Department of Motor Vehicles. Department of Motor Vehicles driving record may influence employment or classification.

And

Possession of a valid Engineer in Training (Fundamentals of Engineering) Certificate.

Experience: Any combination of training and experience, which would likely provide the required knowledge and abilities, is qualifying. A typical way would be to have one year of paid work-experience designing electric and/or controls in a water, wastewater or similar environment.

Education: Typically, the successful candidate will possess a Bachelor of Science Degree in Electrical Engineering or a related field from an accredited college or university.

Knowledge of:
- Principles and practices of electrical engineering.
- Principles and practices of controls technology.
- Design requirements for electric and controls systems utilized in a water and/or wastewater environment.
- Power distribution load control systems and power electronics.
- General personal computer use and applications as they relate to engineering, spreadsheets and database management.
- Electrical safety practices and procedures.
- Fundamental understanding of water and wastewater engineering.
- Construction engineering including surveying, inspection, methods, materials, equipment, laws and job site safety.
- Technical writing skills as required for the preparation and review of electric and controls specifications and reports as well as correspondence for contract administration and customer inquiries.
- Engineering economics.

Abilities:
- Perform engineering work in the design of electric and controls systems utilized in a water and/or wastewater environment.
- Perform detailed review of electric and controls plans, specifications and shop drawings.
- Perform periodic inspections of electric and control systems construction and coordinate the day to day inspection by others.
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MINIMUM QUALIFICATIONS (Cont.):

Abilities (Cont.):
- Prepare accurate cost estimates for electric and controls systems including first cost and ongoing operational expenditures.
- Act as a resource to project engineers, other departments and other agencies providing expertise in the electric and controls field.
- Solve difficult engineering problems utilizing engineering principles, computer applications and creative thinking.
- Work cooperatively with others.
- Communicate effectively verbally and in writing.
- Operate a personal computer using standard office environment and engineering software.
- Work safely around electrical equipment and instruct others in safe practices.

PHYSICAL REQUIREMENTS:

1. Drives district vehicle to job sites including over rough terrain.
2. May work in extreme weather conditions including heat and rain.
3. Uses telephone and two-way radio to communicate.
4. Uses personal computer, keyboard, mouse and monitor for long periods.
5. Climbs ladders to a height of 20’ or more.
6. Lifting is generally limited to 25 lbs. or less.

See Human Resources for physical assessment form.

ONLY QUALIFIED INDIVIDUALS SHOULD APPLY. HUMAN RESOURCES WILL SCREEN ALL APPLICANTS TO DETERMINE QUALIFICATIONS AND ATTENDANCE. ONLY THOSE APPLICANTS WITH GOOD ATTENDANCE WILL BE CONSIDERED OR INTERVIEWED.

The Coachella Valley Water District reserves the right to change or modify the terms, conditions and salary of this position or to withdraw this position at any time.

OPEN: 03-27-01  CLOSED: 04-02-01