

**Maintenance Electrician
Job Description
Southwest Water Authority**

Scope of Work

The individual in this position will perform work activities associated with operating and maintaining a large-scale regional water distribution system -- Southwest Pipeline Project (SWPP) — which includes the pipeline and associated appurtenances, pumping stations, storage reservoirs and water treatment facilities. Particular emphasis is placed on electrical equipment, cathodic protection systems, and the SCADA Telemetry System. This position requires the individual to assist the Southwest Water Authority's (SWA) Water Distribution Manager by reviewing electrical construction plans and specifications as needed. The individual in this position will also work closely with other maintenance personnel in all aspects of SWPP Operations and Maintenance (O&M). The SWA is a political subdivision led by a 15 member Board of Directors.

Essential Functions

Electrical O&M

1. Review and become familiar with project plans, specifications and O&M manuals.
2. Perform equipment maintenance - scheduled or necessary as required.
3. Prepare reports and maintain operating records.
4. Electrical installations as needed for project renovations or expansion in accordance with national, state and local electrical codes.

Cathodic Protection Systems

1. Review and become familiar with project plans, specifications and O&M manuals.
2. Develop, implement, and oversee a monitoring schedule.
3. Develop, maintain and oversee operating records and reports.
4. Make adjustments as required for optimum protection.

Radio Telemetry System

1. Review and become familiar with plans, specifications, operation of SCADA controlled equipment and manuals for radio-controlled equipment.
2. Trouble shoot and repair equipment as necessary.
3. Adjustments and calibrations as required.
4. Assist and coordinate expansion to the system.

Facilities Operations and Maintenance

1. Review and become familiar with plans, specifications and manuals for all pump stations, vaults, pipelines and appurtenances and water treatment plants.
2. Perform maintenance and make repairs as required by manuals.
3. Maintain operating records and prepare reports.
4. Become familiar with all aspects of the water distribution system and water treatment plants.
5. Assist maintenance personnel when necessary.

6. Review problems in all areas with Water Distribution Manager and Project Engineers when necessary.

Other

1. Perform on-call duties as assigned.
2. Various small-scale tasks, maintaining facility's cleanliness, computer and equipment maintenance.

Knowledge, Skills, and Abilities

1. Knowledge of Southwest Water Authority policies, rules, regulations and procedures in order to perform duties efficiently and provide information to customers and other contacts.
2. Knowledge of federal, state and local policies applicable to operating and maintaining a large-scale water distribution system and water treatment plants.
3. Knowledge of federal, state and local electrical regulations governing system upgrades or facility renovations.
4. Knowledge of cathodic protection systems operations and performance.
5. Ability to communicate and deal tactfully with consultants, contractors and the public.
6. Ability to maintain effective working relationships with Southwest Water Authority Staff.
7. Ability to work independently and efficiently.
8. Ability to coordinate work schedule to obtain optimum efficiency and to incorporate new facility integration when needed.
9. Ability to express self logically and concisely in both oral and written form.

Typical Physical/Mental/Environmental Demands

1. Involves moderate risks that require special safety precautions and equipment in performing maintenance on radio towers, in manholes, vaults, buried distribution equipment, pump stations, water reservoirs and excavations.
2. Involves periods of working in temperature extremes or in confined spaces.
3. Involves working with hand and power tools, technical instruments, radio equipment, motorized equipment and computers.
4. Requires ability to read and write reports and interpret manuals, and analyze data or reports.
5. Requires the ability to work courteously and firmly with others.
6. Requires finger dexterity, hearing, vision, and the ability to do close work.
7. Requires extended periods driving a vehicle, working with equipment such as backhoes, trenchers, end loaders and skid steers and using acetylene and arc welders. Occasionally must lift up to 75 pounds.

Supervision

This individual is under the administrative supervision of the Water Distribution Manager. In the absence of, or at the direction of the Water Distribution Manager, the Maintenance Electrician reports to the Chief Water Distribution Operator for work assignments. Work is performed independently,

Job description: SWA Maintenance Electrician
February 9, 2024

with the Maintenance Electrician being fully responsible for planning, scheduling and executing all assignments necessary to operate and maintain the system. Assistance on precedent or unusually complex cases is available from the Water Distribution Manager. Work is not regularly reviewed; however, periodic meetings are held with the Water Distribution Manager.

Guidelines

Guidelines consist of becoming familiar with O&M manuals, established SWA procedures, Rules & Regulations, precedents, laws, regulations and ordinances of the local, state and federal governments concerning electrical requirements. This individual exercises judgment and ingenuity in interpreting and applying guidelines in the various work situations.

Complexity

Job complexity derives from the following:

1. Review and assessment of engineering and construction plans as related to electrical, telemetry, cathodic protection and miscellaneous vault details.
2. Contacts with contractors, suppliers and technical consultants.
3. Application of sound electrical practices as mandated by federal, state and local jurisdictions.

Personal Contacts

Contacts are with personnel within the SWA, consultants, contractors, customers and the public.

Purpose of Contacts

The purpose of the contacts is to operate and maintain the SWPP by obtaining or exchanging pertinent information. Contacts with customers and the public require the employee to be a courteous and tactful representative of SWA.

Education and Experience

1. High school diploma or equivalent.
2. Completion of a two year Electrical Technical Degree and three years' experience or equivalent work experience in an electrical construction or maintenance position with exposure to all aspects of electrical technology.
3. Must have or must acquire a journeyman electrician's license within six months.
4. Must have or be willing to acquire a Class A Driver's License within 12 months with the following minimum restrictions: not valid to operate truck-tractor and non-air braked equipped vehicle.
5. Must acquire cathodic protection certification when eligible.

Nonessential Functions

Job description: SWA Maintenance Electrician
February 9, 2024

1. Typing.
2. Use of calculator, spreadsheets, databases, GIS, and any other software required to perform job functions.

Knowledge of Equipment

Vehicles	Generators	Telephone
Mobile or Cell Phones	Personal Computers	Multimeters
Amprobes	Calculator	Wattmeter
Personal Protective Equipment ARC View GIS/GPS	Pipe & Cable Locators	Current Interrupters

Location and Work Hours

This position is headquartered in Dickinson, North Dakota, but requires travel throughout the 12 counties included in the distribution system. Employee may be required to travel outside the 12 counties to attend meetings and training sessions necessary for the position. Work hours are as needed to carry out the duties and responsibilities, normally a 40-hour workweek.

Level of Responsibility

The Water Distribution Manager supervises this individual. The individual in this position is required to supervise operation & maintenance personnel when their assistance is required with essential function duties.

Salary

This is a full time non-exempt position with a standard benefit package.

The statements herein are intended to describe the general nature and level of work being performed by the person assigned to this position. The statements are not intended to be construed as an exhaustive list of all responsibilities, duties, and skills required of personnel as classified.