

**KENNEWICK IRRIGATION DISTRICT
JOB DESCRIPTION**

ELECTRICIAN I

REPORTS TO: Assistant Operations/Maintenance Manager
DATE: February 2019

GENERAL SUMMARY: Under the direction of the Assistant Operations/Maintenance Manager, this skilled position performs electrical, mechanical and instrumentation maintenance work for the District. Incumbent inspects, troubleshoots, diagnoses, calibrates, repairs, maintains, and installs water distribution equipment such as variable frequency drives (VFD), low volt controls, single and 3 phase powered equipment, and related instruments/controls.

ESSENTIAL DUTIES

1. Maintain, repair, install, troubleshoot and adjust various electrical systems, including but not limited to, HVAC, facilities, electric motors, VFDs, electric controls, and switch gear.
2. Maintain, repair, install, troubleshoot and program instrumentation control systems including calibration and adjustment of telemetry equipment.
3. Implement preventative program on pumping systems components to ensure compliance with program goals and objectives.
4. Diagnose and calibrate deployed equipment throughout the district.
5. Maintain accurate and current records of the I & C systems including set points, historical records, record drawings, schematics, and shop drawings.
6. Respond to call outs as necessary.
7. Drive District vehicles in the course of duties.
8. Other duties as assigned

EDUCATION & EXPERIENCE

1. High school diploma or G.E.D.
2. Two (2) years of technical training in electrical, instrumentation and control technology or related field or completion of 2 years of an electrical apprenticeship

LICENSES/CERTIFICATIONS

1. First aid and CPR certified within one year
2. Washington State Flagger certification within 6 months
3. Washington State Driver's License

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of:

1. Federal, State, and local laws, rules, codes and regulations applicable to assigned activities.
2. Record-keeping principles, procedures and techniques.
3. National Electric Code.
4. Basic conduit bending and installation.

5. Principles, practices, techniques and instruments used in monitoring, troubleshooting, testing and calibrating motors of various sizes, pumps and associated equipment and components
6. Operational principles of remote terminal units (RTU), programmable logic controllers (PLC) and VFDs
7. Principles and practices of operation software and programming, including Wonderware, Allen Bradley PLC programming, ladder logic, Red Lion Controls, and various VFD programming.

Ability to:

1. Prepare written reports and communicate technical information clearly and concisely, both orally and in writing.
2. Read and interpret electrical and technical instrumentation and control drawings.
3. Troubleshoot, repair and program VFDs.
4. Operate a variety of equipment related to assignment.
5. Troubleshoot and diagnose SCADA and radio problems.
6. Program PLCs.

WORKING CONDITIONS

1. This position is normally both in an office environment and working outdoors in all weather conditions.
2. Heavy lifting and pulling up to 80 pounds, standing, kneeling, sitting, and climbing.
3. Work will also be done within electrical cabinets and around operating pump stations.
4. Includes climbing radio towers as necessary.

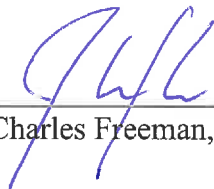
Job Analysis

	N	S	O	F	C	
Climbing			X			On ladder to get to pump area
Balancing		X				On ladder to get to pump area
Stooping/Bending				X		Bend down to work on pump
Twisting			X			Twist to get to part on pump
Squatting/Kneeling				X		Option to bending
Crawling		X				Get to Pump
Foot Controls				X		Drive vehicle to and from work site
Reaching Forward				X		Drive vehicle, work on pump in front of worker
(Level) Below Waist			X			Work on pump component on ground
Above Shoulder		X				Work on pump component overhead
Handle/Grasp					X	Tools, steering wheel, parts
Fine Finger Manipulation				X		Screws, nuts, parts
Hand Controls			X			Vehicle
Repetitive Motion			X			Body part: Cycles/hr.:
Vibratory Tasks			X			Vibration of power hand tools

	N	S	O	F	C	
Talking				X		To Customer Service, customer, supervisor
Hearing				X		Listen to Customer Service, customer, supervisor
Visual: See water drip, drum tear, small parts						
ENVIRONMENTAL CONDITIONS - FREQUENCY:						
	N	S	O	F	C	
Exposure to Weather						X
Extreme Cold			X			
Extreme Hot			X			
Wet and/or Humidity			X			
Proximity to Moving Mechanical Parts				X		
Exposure to Explosives	X					
Noise Intensity - Loud				X		
Atmospheric Conditions						X
Exposure to Heights			X			
Exposure to Electricity				X		
Exposure to Toxic/Caustic Chemicals		X				
Exposure to Radiation	X					

Key: N = Never S = Seldom O = Occasional F = Frequent C = Constant

Approved:

 FOR CHARLES FREEMAN
 Charles Freeman, District Manager

Date: 2/21/19

Date Board confirmed: 2/19/19