

**KENNEWICK IRRIGATION DISTRICT
JOB DESCRIPTION**

PUMP AND CONTROL SPECIALIST

REPORTS TO: Assistant Operations/Maintenance Manager
DATE: October 2015

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. In addition, incumbent will manage the district's two potable water systems with respect to well fields, interties, storage tanks, pumping facilities and ensure compliance with WA State Department of Drinking Water regulations.

ESSENTIAL DUTIES

1. Maintain, repair, install, troubleshoot and adjust various electric motors and 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.
3. Four (4) years of related field experience.

LICENSES/CERTIFICATIONS

1. First aid and CPR certified within one year
2. Washington State Flagger certification within 6 months
3. Water Distribution Manager II level upon hire

4. Washington State Driver's License

REQUIREMENTS

1. An acceptable driving record

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of:

1. Principles and practices of instrumentation and control systems
2. Principles, practices, techniques and instruments used in monitoring, troubleshooting, testing and calibrating motors of various sizes, pumps and associated equipment and components
3. Operational principles of remote terminal units (RTU), programmable logic controllers (PLC) and VFDs
4. WA State Drinking Water regulations and implementation of regulations into compliance
5. 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 to communicate technical information clearly and concisely both orally and in writing.
2. Read and interpret technical instrumentations and control and electrical 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

	N	S	O	F	C	
Foot Controls				X		Drive vehicle to and from work site
Reaching (Level) Forward Below Waist Above Shoulder				X		Drive vehicle, work on pump in front of worker
			X			Work on pump component on ground
		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
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:


Charles Freeman, District Manager

Date: 10/20/15

Date Board confirmed: October 20, 2015