

**City of Pendleton**

**Job Description**

**Control Systems Technician**

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| **Department**:  Public Works | **FLSA**:  Non-exempt |
| **Reports to**:  Control Systems Manager | **Representation**:  SEIU |
| **Pay Range**:  Range 23 | **Date**:  April 2020 |

**GENERAL POSITION SUMMARY:** *(Briefly describe why this position exists.)*

Performs skilled work in the operation, programming, repair, and maintenance of control systems and electrical equipment; does related work as required.

**DUTIES AND RESPONSIBILITIES:**

Tasks listed are intended to be descriptive and not restrictive. An employee in this classification may perform any of the tasks listed; however, these examples do not include all the tasks which an employee may be expected to perform.

**ESSENTIAL FUNCTIONS/MAJOR RESPONSIBILITIES:** *(List those tasks that must be done to accomplish the job purpose. In order of importance or time spent on the task, please describe the various duties of the job which are critical to the successful performance of the job* ***or*** *occupy more than 5% of the time. Start each sentence with an action verb. Group tasks which require similar skills/knowledge together. Think in terms of WHAT needs done, not HOW it is done. Avoid describing procedures. Describe in such a way as to be clear to someone outside the profession.)*

1. Control and Electrical Systems Operations: Performing day-to-day operation and maintenance of control and electrical systems related to Public Works facilities. These facilities include, but are not limited to, Water Filtration Plant (WFP), Aquifer Storage & Recovery (ASR) and hydropower wells, production wells, booster pump stations, water fill stations, pressure reducing stations, lift stations, Resource Recovery Facility (RRF), Supervisory Control and Data Acquisition (SCADA) system, and all the control and electrical appurtenances located at these facilities.
2. SCADA System Operations: Assisting Water Superintendent and RRF Superintendent with SCADA system troubleshooting and optimizing control programming for all facilities in conformance with established policy and procedures and for compliance with State and Federal requirements.
3. Control Systems Management: Monitor and adjust the SCADA system for WFP and distribution system and for RRF and collection system.  Repair and adjust control valves, actuators, variety of pumps, pressure reducing valves, etc.  Install electrical and control conduit, liquid-tight flexible conduit, and pull and land wire from 20 gage to 500 MCM.  Install wire and troubleshoot pressure and level transducers; Dissolved Oxygen (DO), Oxygen Reduction Potential (ORP), etc. probes; resistive temperature devices (RTDs); lights and outlets; solenoid valves and limit switches; and motors up to 450 horsepower (HP).  Program and troubleshoot Allen Bradley Compact and Contrologix Program Logic Controllers (PLCs).  Edit and draw changes to AutoCAD LT control system files.  Keep all documentation for SCADA system updated.
4. Preparing project reports of materials and equipment used and work accomplished. Inputting data into computer, electronic operation and maintenance software, keeping accurate records, and reviewing work with Water Superintendent and RRF Superintendent.
5. Providing recommendations for control and electrical equipment operation, maintenance, replacement, and/or upgrades.
6. Writing and updating standard operating procedures and work plans.
7. Other duties as assigned by the Water Superintendent as primary supervisor; RRF Superintendent as the secondary supervisor; and in their absence, the Public Works Director for control of electrical systems related issues.

**IMPORTANT FUNCTIONS:** *(List those tasks or duties that may be assigned, but are not essential to fulfill the job purpose; any ancillary job tasks, or those that take less than 5% of the time. All jobs have non-essential functions.)*

1. Working with Water Superintendent to develop programming skills and control understanding related to SCADA for optimizing facility performance.
2. Periodically operate boom truck and lift truck.  Be able to climb 30-foot ladders on reservoirs, antenna tower, or into 5- to 30-foot deep vaults using appropriate personal protective equipment.
3. Attends training, staff meetings, safety meetings, etc.
4. Other duties as assigned.

**DISTINGUISHING CHARACTERISTICS:** *(If the position is in a series, describe what separates this job from the others in the series.)*

Position is distinguished from the Control Systems Manager position by the absence of primary responsibility for the operation and maintenance of control and electrical systems, including analysis, planning, goal-setting, budgetary and supervisory responsibilities

**JOB SPECIFICATIONS:**

**1. Education & Experience:** *(Education and experience requirements are minimum standards.)*

1. High School Diploma (or GED) is required.
2. Associate Degreein electrical or control systems preferred, but not required for the position; and
3. Work Experience: Indicate the minimum level of work-related experience required to effectively perform the position’s responsibilities. *(Check only one box.)*

Less than 12 months

1 – 3 years

3 – 5 years

5 – 8 years

Other

Describe experience: 4-years of experience in control and/or electrical work, or a related field.

1. Any satisfactory equivalent combination of education and experience.

**2. Necessary Knowledge, Skills and Abilities:** *(Note any specific knowledge, skills or abilities needed for this position.)*

1. Knowledge of methods, tools, techniques, materials and equipment related to all aspects of control and/or electrical systems.
2. Knowledge of quality control and quality assurance techniques related to control and/or electrical systems.
3. Knowledge of and ability to use proficiently a variety of software programs which may include, but not be limited to, Rockwell Solutions (RS) View 32, RS Contrologix, RS Historian, Windows operating system, AutoCAD LT, Excel, Access (database), Sequel (database), and Word.
4. Ability to work efficiently.
5. Knowledge of City policies, procedures, regulations, and codes related to area of responsibility.
6. Knowledge of safety standards, practices and procedures applicable to area of assignment.
7. Ability to perform data entry and use word processing and spreadsheet programs.
8. Ability to use information technology software and hardware for work orders, time reporting, data collecting, inventory, and other applications related to operation and maintenance activities for the department.
9. Ability to communicate effectively, verbally and in writing, in English.
10. Ability to read, follow directions, complete forms and reports.
11. Ability to understand, analyze, and interpret maintenance manuals and technical papers.
12. Ability to diagnose and analyze problems and recommend and/or institute a corrective action.
13. Ability to respond to emergencies on a 24-hour basis.
14. Ability to work independently in the absence of direct supervision.
15. Ability to maintain regular and predictable attendance to serve customers, interact with co-workers/supervisor/patrons/clients, attend meetings, training, etc., and other face-to-face job requirements.
16. Ability to establish and maintain effective working relationships.
17. Ability to work as a positive and effective team member.
18. Ability to provide positive and effective customer service to all citizens, rate-payers, vendors and employees.
19. Ability to perform work in a manner consistent with the City’s Core Values of: Respect, Integrity, Caring, Responsibility, Citizenship, Cooperation and Industriousness.
20. Ability to work efficiently and perform the essential functions of the job.

**3.** **Special Requirements:**

1. Must possess, or be able to obtain by time of hire, a valid driver’s license.
2. Must be able to pass the department’s security clearance standards including review of criminal history and driving record.
3. Must possess at time of hire State of Oregon Limited Journeyman Electrician License or higher level.

**4.** **Tools and Equipment Used:** *(List specialized tools or equipment needed to perform tasks.)*

1. Standard office equipment including telephones, computer, printer, fax machine and copy machines; Computer software: *(Choose all that apply)*

MS based word-processing, spreadsheet, and/or data base programs

Outlook or other email communication.

Internet and/or social media

Presentation or desktop publishing software

Specialized or custom software

1. Vehicle - Car/pickup/van/SUV
2. Variety of hand tools as well as power tools, including, but not limited to: Fluke 789 Process meter, Fluke 725 Multifunction Process calibrator, Fluke 345 PQ Clamp meter, wrenches, hammers, screwdriver, etc. needed for operation and maintenance of control and electrical systems.

**5.** **Supervision:**

1. This position does not supervise other staff.
2. This position does not provide lead worker direction.
3. In the absence of the Control Systems Manager, this position reports to Water Superintendent or the WWTRRF Superintendent. Supervision received is: *(Choose one)*

Direct. Supervisor provides assignments, directs work on a regular basis, and tasks or procedures are usually well defined.

General. Work is assigned more generally with the employee having some autonomy to determine the order or manner in which the work is completed. Policies and procedures exist.

Limited. Work is performed highly independently with little direction. Position has significant decision-making discretion. Work is evaluated for overall effectiveness.

**6. Communications:**

1. Communications are: *(Choose one)*

Primarily with other City staff, vendors and/or customers.

Regularly includes others outside the organization (not customers), such as contractors, attorneys, agents, or business partners.

Routinely with leaders inside and outside the organization such as department heads, City Councilors, public officials from other agencies, and/or community leaders.

1. The communications may be: *(Check any that apply)*

Complex

Controversial

Confidential

Have significant impact (affect City services or reputation, or have legal or financial consequences)

**7. Cognitive Functions**: (*Check the one that most closely aligns to position.)*

Tasks are highly creative or complex and requires significant mental exertion that would typically require specialized schooling, training, certification or a license to be able to accomplish.

Responsibilities include significant accountability (i.e. could expose the City to risk or liability, generate public censure, or impact the work or reputation of the City.)

Work is performed highly independently. Employee has significant control over the planning and performance of the work, and may determine their own practices and procedures. Routinely engages in autonomous problem-solving.

Responsible for developing programs/services; determining quantity and/or quality standards; and monitoring, evaluating, and analyzing program effectiveness to determine success or failure. May include developing and implementing policies, procedures or regulations.

1. **Problem Solving:** (*Indicate the nature of problems regularly encountered by this position. Check only one box.)*

Most situations are resolved using standard procedures and established guidelines.

Situations are somewhat varied; requires application of specific technical skills and expertise.

Varied situations that require significant analysis or interpretation; general precedents and practices used, but may be modified.

Highly varied and unpredictable situations, complex and often non-recurring; new and creative approaches required.

**9.Work Environment*:*** *(The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.)*

1. Work is performed outdoors and indoors. Work is most often inside a facility that is not temperature controlled.
2. Strength Rating (see attached definitions) is: Medium
3. Hazards include: (*Check all that apply and include the percentage of time exposed to the listed hazard.)*

Office environment/no specific or unusual physical or environmental demands.

Work on and around heavy construction equipment **0–1%**

Exposure to toxic elements/hazardous chemicals **0-5%**

Work at heights in excess of 20 feet **0-5%**

More than occasional exposure to poor air quality (excessive dust, smoke, fumes, gases, etc.) **0-1%**

Exposure to weather or temperature extremes **0-80%**

Isolation **0-95%**

Exposure to light or noise extremes **25-50%**

Regular travel outside the City \_\_\_\_%

Risk of injury **from electrical shock, moving mechanical parts, operating tools, falling off ladder, tripping, lifting, performance of job duties** **100%**

Significant physical exertion required to **perform duties** **0-5%**

Other (describe) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. General hours of work are 7:00 a.m. – 4:00 p.m. Monday – Friday; however, person in this classification will be required to work after-hours and on weekend and will be available and responsive to emergency call-out. Variations include: *(Check all that apply)*

Frequent or regular overtime

Subject to emergency call out

Split or night shifts

e) Employee must live within 30-minutes response time to Public Works facilities.

**10. Resource Accountability:**

1. Check item(s) that describe involvement in the budgetary process:

Not applicable  Input  Prepare  Forecast  Monitor  Approve

1. This position has resource accountability for the following level of purchasing: *(Choose one)*

Significant – as would be typified by purchasing authorization up to $25,000, or responsibility for operation or use of very high level equipment/assets.

Moderate – as would be typified by purchasing authority up to $5,000 or responsibility for operation or use of equipment/assets of moderate value.

None/Low – employees with no purchasing authority or responsibility for operation or use of equipment/assets of modest value.

1. Persons in this classification are responsible to make purchasing decisions resulting in the most efficient solution for the lowest cost.

*The job classification description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.*

Drafted: January 2014

Adopted: N/A

Revised: April 2020

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Employee Acknowledgement/Date Supervisor Approval/Date

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Department Head Approval/Date Administration Approval/Date

Overall Job Strength Rating Definitions

(Oregon Workers’ Compensation Rules, Div. 436-035-0012)

**S - Sedentary** – exerting up to 10 pounds of force occasionally, or a negligible amount of force frequently to lift, carry, push, pull, or otherwise move objects. Job is mostly sitting, but brief walking and/or standing (occasionally) may be required.

**L – Light**  - exerting up to 20 pounds of force occasionally, or up to 10 pounds of force frequently, or a negligible amount of force continually to lift, carry, push, pull or move objects. Job is largely sitting, but more than sedentary walking or standing may be required. Work is light if job tasks are done sitting, but considerable upper body or arm movement or use of leg controls is involved.

**M – Medium** - exerting 20 to 50 pounds of force occasionally, or 10 to 25 pounds of force frequently, or greater than negligible up to 10 pounds of force continually to lift, carry, push, pull or move objects. Standing, walking, and/or other positional physical movements may be occasional to frequent.

**H – Heavy** – exerting 50 to 100 pounds of force occasionally, or 25 to 50 pounds of force frequently, or 10 to 20 pounds of force continually to lift, carry, push, pull, or move objects. Walking, standing, and other positional physical requirements may be frequent to continual.

**V/H – Very Heavy** – exerting in excess of 100 pounds of force occasionally, or in excess of 50 pounds of force frequently, or in excess of 20 pounds of force continually to lift, carry, push, pull, or move objects. Walking, standing, and other positional physical requirements may be frequent to continual.