



Controls Technician I

DEFINITION

Under supervision, participates in the programming, installation, and maintenance of all components associated with control systems located throughout the District, and performs related work as required.

DISTINGUISHING CHARACTERISTICS

This is the first level in the Control Technician series. Incumbents receive specific assignments and operate under close supervision until their knowledge and job skills expand. Incumbents are expected to increase their knowledge, skills and abilities related to the installation and repair of control system equipment in order to move to the Controls Technician II.

Positions in the Controls Technician class series are flexibly staffed; positions at the Controls Technician II level are normally filled by advancement from the Controls Technician I level; progression to the Controls Technician II level is dependent on (i) management affirmation that the position is performing the full range of duties assigned to the classification; (ii) satisfactory work performance; (iii) the incumbent meeting the minimum qualifications for the classification including any licenses and certifications; (iv) the incumbent satisfactorily meeting the internal promotional criteria; and (v) management approval for progression to the Controls Technician II level.

EXAMPLES OF DUTIES

Typical duties may include but are not limited to the following:

- Participates in the programming, installation, and maintenance of programmable logic controllers (PLC);
- installs, maintains, and repairs telemetry communication devices, such as modems, digital service units, port expanders and 900 MHz MAS radios;
- performs data base modifications to SCADA (Supervisory Control and Data Acquisition) system software;
- performs modifications to SCADA system operator interface screens;
- performs electrical and electronic repairs;
- maintains control system documentation;
- keeps abreast of technological changes; and
- follows applicable safety rules and regulations.

QUALIFICATIONS FOR EMPLOYMENT

Knowledge of:

- Testing and calibration of telemetry sensing devices;
- terms, practices and procedures common to the electronic or electrical trades;
- tools and instruments used in the repair and maintenance of electronic, electrical and mechanical/electrical equipment; and
- computer hardware and operating systems used in modern SCADA systems.

Ability to:

- Interpret and work from schematic diagrams;
- repair and maintain electronic, electrical and mechanical/electrical equipment;
- understand and learn from technical documentation associated with District control systems;
- understand and use software used in modern control systems;
- troubleshoot and diagnose equipment failures;
- understand and carry out written and oral instructions;
- deal effectively with those contacted in the course of work;
- travel to alternative work locations and off-site meetings; and
- drive a vehicle.

Training and Experience: Any combination equivalent to experience and education that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

Completion of the twelfth grade or its equivalent; and two years' working with computer systems or electronic/electrical equipment;

OR

An Associate of Science degree in instrumentation, measurement and control, electrical, electronics or mechanical technologies or closely related field.

INTERNAL PROMOTIONAL CRITERIA:

- For non-competitive internal promotional criteria, please refer to the Flex Criteria Matrix for the applicable classification series.

OTHER REQUIREMENTS

- Per California Government Code, Title 1, Division 4, Chapter 8, Section 3100 "all public employees are hereby declared to be disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law."
- Work on an "on call" basis and carry a District provided pager for emergency situations.

LICENSES AND/OR CERTIFICATIONS

- Possession of an appropriate California driver's license issued by the California Department of Motor Vehicles and satisfactory driving record; and
- Possession of a valid D1 Distribution Operator certification issued by the California State Water Resources Control Board (SWRCB) is required within one year of hire.
- Possession of an Instrumentation, Systems, and Automation Society (ISA) certification as "Level I Certified Control Systems Technician" is HIGHLY DESIRABLE.

PHYSICAL DEMANDS AND WORKING CONDITIONS

During the course of performing job duties the employee will perform heavy physical work and will need the mobility to operate equipment, which may include office and/or field equipment, or specialized instruments or tools requiring repetitive arm/hand movement and/or the coordinated movement of more than one limb simultaneously; enter and retrieve data from personal computers and terminals via keyboards. The employee frequently stands, walks, bends at neck and waists, twists at neck and waist, uses simple and power grasping with both hands, uses fine manipulation of both hands and fingers, and may require use of the arms above the shoulder, climb or balance; stoop, kneel or crouch. While working in the field the employee may walk on uneven or un-level ground surfaces such as hills, slopes, ditches or trenches, on or in tanks, and may work at heights up to ten to twelve feet climbing ladders or stairs. The employee is frequently required to lift and carry short distances objects such as materials or equipment weighing up to 10 to 50 pounds and occasionally lift 50 to 75 pounds. This position requires that the employee demonstrate adequate hearing to detect warning alarms and speech to converse in person and over the telephone or radio, and vision to read printed materials and detect color coded materials, and use a computer screen.

The noise level in the work environment is moderate to loud noise. The employee is exposed to moving vehicles and other moving equipment and machinery, excessive noise, extremes in temperature, humidity, wetness and dust. The position may require the ability to work overtime and weekends as needed.

Employees who drive on District business to carry out job-related duties must possess a California driver's license for the class of vehicle driven and meet automobile insurability requirements of the District including review of a recent DMV history. In order to drive, individuals must be physically capable of operating the vehicles and equipment safely.

ADDITIONAL PHYSICAL DEMANDS

- A self contained breathing apparatus must be worn when working in confined spaces and employee must be capable of obtaining and maintaining a proper facial seal for District respiratory equipment.

To be successful in this job, an individual must be able to satisfactorily perform each of the listed duties. These duties are representative of the knowledge, skill and/or ability required for the position. Reasonable accommodations may be made to enable individuals with disabilities to perform the duties and functions of the position. Requests for reasonable accommodation should be directed to the Human Resources Manager.

Established: November 1996
Revised: October 2008, November 2021
Approved by: Human Resources Manager