

# STOCKTON UNIFIED SCHOOL DISTRICT

## ENERGY MANAGEMENT CONTROL PROGRAMMER

### **DEFINITION:**

Receives general supervision from the Plumbing/HVAC Supervisor to perform skilled work and programming on the District's Energy Management HVAC Control Systems. This position is responsible for the operation, maintenance and programming of a Building Automation System. Uses appropriate test devices, troubleshoots and repairs pneumatic, electrical and electronic control systems. Checks accuracy and calibrates all system components. Installs and calibrates new or replacement devices and reprograms per manufacturers specification. Reprograms building automation system to achieve maximum energy savings. Installs, updates and changes control schedules and the operation of HVAC systems. This position scans and records problems and submits to supervisor to assign work repairs. Monitors many points of the variable frequency drives-amps, air flow, and motor speeds. Position does very minimal HVAC mechanical work.

**REPRESENTATIVE DUTIES:** *(Incumbents may perform any combination of the essential functions shown below (E). This position description is not intended to be an exhaustive list of all duties, knowledge, or abilities associated with this classification but is intended to accurately reflect the principle job elements.)*

Lay out work and inspection of completed work. Assist in commissioning new EMS control systems. (E)

Routinely and consistently perform diverse and complex tasks using considerable knowledge of electronic principles. (E)

Tasks requiring in-depth analysis. (E)

May require ability to modify and/or design electronic circuits or hardware to complete assignment. (E)

Develop innovative electronics troubleshooting and testing procedures. (E)

Determine circuit configuration and function of complex electronic systems in the absence of documentation. E

Maintains regular and prompt attendance in the workplace. (E)

Perform related duties as assigned.

### **QUALIFICATIONS**

#### **Knowledge of:**

- Comprehensive and complete understanding of the operation of HVAC systems, including multi-zones, package units and chiller systems.
- Working knowledge of automation systems extended architecture networks and PLC Logic.

- Communicate effectively with contractor representatives and vendors involved in providing supplies and services related to HVAC and controls functions
- Exercise good judgment and discretion in establishing work priorities
- Other construction and craft trade responsibilities and disciplines as they relate to the job functions of an Energy Management Systems Control Programmer

**Ability to:**

- Must be able to build, design, and write programs for complex HVAC systems, and also be able to create a working sequence of operation for these systems.
- Must be able to calibrate temperature sensors, electronic devices, and pneumatic control devices.
- Be able to commission HVAC systems, controllers and equipment.
- Use/operate tools, equipment and supplies required to perform the tasks of a Energy Management Systems Control Programmer
- Prepare and maintain reports and records related to the District's EMS and HVAC systems.
- Maintain cooperative working relationships with others
- Work independently without close supervision
- Interpret and implement District's rules, regulations and specifications
- Standard practices, material, equipment and tools related to the HVAC trade.
- Oral and written communication skills.
- Physical capability sufficient to perform job tasks

**EXPERIENCE AND EDUCATION**

- Any combination of education, training and/or experience equivalent to completion of one year of responsible journeyman level experience as an Energy Management Controls Specialist or a HVAC Technician
- Four (4) years of increasingly responsible EMS/HVAC work, preferably in an educational institution or major industrial environment
- Experience in programming and designing energy management control systems is highly desirable.

**WORKING CONDITIONS**

**Environment:**

- Indoor and outdoor work environment; regular exposure to fumes, dust and odors; as required must wear protective devices such as earplugs, dust mask, coveralls, gloves, work boots and safety glasses; enclosed work spaces.

**Physical Demands:**

Employees in this position must have/be able to:

- Lift and/or carry up to 60 lbs at waist height for short distances
- Occasionally lift 50 lbs overhead for short distances
- Dexterity of hands and fingers to operate a variety of trade tools
- Walk and/or stand for extended periods of time;
- See with/without assistive devices sufficient to perform assigned duties
- Bend at the waist, kneel, crawl, crouch and stoop; reach overhead, above and below the shoulders and horizontally
- Climb ladders and work from heights
- See, hear and speak with/without assistive devices sufficient to communicate effectively with others.
- Push/Pull up to 90 lbs up to 100 feet

Hazards:

- Working on ladders; on roofs and energized circuitry.
- Natural gas
- Exposure to heat and cold from heating and cooling system.
- Welding flame

**LICENSE OR CERTIFICATES**

- Possession of a valid California driver's license
- Valid First Aid and CPR certificates must be obtained within six (6) months from the date of hire