



CLASS SPECIFICATION

Class Code: 8134
Date Est: 2/98
Last Rev: 2/98
Last Title Chg:
FLSA: non-exempt

BUILDING SYSTEM CONTROLS SPECIALIST

DEFINITION

Under general supervision, plans, implements, and maintains County energy management systems; creates and evaluates energy consumption tracking reports; develops plans for increased efficiency of heating and cooling systems; and performs related work as required.

EXPERIENCE AND TRAINING REQUIREMENTS

Two years of experience in system controls calibration and computerized energy management systems in a commercial, industrial, or institutional setting; OR an equivalent combination of technical education and experience.

LICENSE OR CERTIFICATE

Possession of a valid driver's license is required at the time of appointment.

SUPERVISION EXERCISED

Exercises no direct supervision, however, incumbent in this class may provide some direction and training for maintenance support staff.

EXAMPLES OF DUTIES *(The following is used as a partial description and is not restrictive as to duties required.)*

Perform routine and emergency maintenance on analog, electrical, electronic and pneumatic equipment and network devices used to collect, process, transmit, receive and record data, which regulates the operation of the controls on buildings.

Maintain and repair building control system components such as sensors, thermostats, valve and damper linkages, variable air volume controls, variable frequency drives, motor starters and relays.

Select, install, and calibrate pneumatic, electric, and direct digital control systems in County facilities.

Design, initiate and evaluate energy efficiency and consumption reports and make recommendations for improved efficiency of operations.

Monitor peak demand usage and recommend adjusted hours of building operations and energy usage to minimize consumption costs; reprograms systems in accordance with recommended changes.

Develop and recommend policies for improved energy efficiencies in County building operations.

Conduct cost/benefit analysis of existing equipment to determine the economic feasibility of replacement.

Estimate material and labor requirements for replacing equipment to determine if the project can be most economically completed in-house or by an outside contractor.

Participate in County design teams involved in planning and designing new facilities and major remodeling of existing facilities by recommending designs and mechanical systems that will optimize energy efficiency.

Train building maintenance support staff on building systems control, operation, maintenance, and repair.

Conduct inspections of new control installations to ensure compliance with design criteria and operational specifications.

Use computer system diagnostic tapes, computer control console switches, indicators, and logic analyzers to locate and replace defective circuit boards and modules in computers and computer peripherals and to repair digital interfaces.

Develop computer programs related to energy management to compensate for new equipment and/or to increase efficiency.

Develop graphic computer displays that indicate real time status of mechanical systems.

Perform job duties in a safe and responsible manner that does not expose the employee, co-workers or the public to unnecessary risk or danger.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Full Performance *(These may be acquired on the job and are needed to perform the work assigned.)*

Knowledge of:

Department policies and procedures.

County purchasing/bidding procedures

Building electrical codes and regulations pertaining to controls, installation and use of heating, ventilating and air conditioning systems.

Ability to:

Assist in budget preparation and monitor expenditures.

Entry Level *(Applicants will be screened for possession of these through written, oral, performance, or other evaluation methods.)*

Knowledge of:

Computerized energy management systems including related software.

Heating, ventilating and air conditioning systems as used in large commercial applications.

Principles and methods used in building systems control maintenance repair and calibration.

Electrical components related to heating, ventilating and air conditioning systems including motor starters, relays, actuators and variable frequency drives.

Ability to:

Operate and maintain a variety of calibration and test equipment for heating, ventilating, and air conditioning systems such as amp and voltmeters, temperature, pressure and voltage simulators and flow hoods.

Program computers relating to energy management systems.

Design and install graphic displays in energy management system computers.

Perform a wide range of skilled building controls work with considerable independence.

Operate hand and power tools.

Estimate material and labor requirements for projects.

Modify existing heating, ventilating and air conditioning systems including designing new circuits for analog and digital equipment.

Read and interpret technical manuals.

Read and interpret schematic diagrams, plans, drawings, and specifications.

Perform mathematical calculations necessary to estimate material needs, calculate equipment capability requirements and recalibrate energy management systems.

Maintain a variety of records and reports.

Establish and maintain cooperative working relationships with supervisors, co-workers, County employees, and outside vendors.

SPECIAL REQUIREMENTS

Essential duties require the following physical skills and work environment.

Ability to stand and walk for extended periods. Ability to frequently stoop, bend, and kneel. Ability to lift and move objects weighing up to 75 lbs. Ability to distinguish between colors. Exposure to dust, fumes, solvents, chemicals, and construction materials.

This class specification is used for classification, recruitment, and examination purposes. It is not to be considered a substitute for work performance standards.

Approved WERCCS Job Evaluation Committee

Date March, 2001