IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼ HUMAN RESOURCES ENTERPRISE

CONTROL CENTER OPERATOR

DEFINITION

Under general supervision monitors a building automation system interfaced with heating, cooling, ventilation and security systems equipment to detect, report and control energy consumption and security problems in state office buildings and institutions; performs related work as required.

The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

WORK EXAMPLES

Operates a building automation system consisting of a digital teletype, display terminal, alarm and data printers, disc storage, closed circuit television, slide projector, field equipment and central processor, to detect, report and correct internal problems in the points controlled.

Establishes temperature limits to control building environmental conditions by entering program changes into the computer to initiate start/stop channels, and automatic restart of preassigned equipment when a failure occurs, and by monitoring the ongoing readout to insure equipment modifications have taken place.

Responds to automation system alarms indicating problems in the heating, cooling or ventilation systems, to pinpoint the malfunction and arrange for corrective action by using an alarm printer, intercom master and slide projector to review blueprints of the equipment malfunctioning.

Monitors a preventive maintenance program via the computer for maintenance on the computer system, the pneumatic controls system and the mechanical equipment to keep the equipment in good working order and to prevent serious malfunctions and accidents by generating preventive maintenance work orders and coordinating them with maintenance personnel or personnel on contract from the manufacturer.

Prepares reports daily for supervisory review of dates and preventive maintenance completed on all computer and pneumatic control systems and mechanical equipment, to insure that all preventive maintenance is completed at the proper time and by the proper method, and to provide data for projecting repair costs and life span of the equipment.

Monitors closed circuit surveillance cameras and other security systems to alert security personnel of any possible problems involving malfunctions in fire alarms or building entry alarms.

Monitors and equalizes electrical peak demand load to lower energy costs by cycling equipment, establishing start/stop operations to spread electrical consumption over a longer period of time.

Monitors maintenance costs via computer to detail time spent on the job, area worked and equipment maintained by preparing monthly data printouts of maintenance schedules and comparing them to the original maintenance work orders.

Monitors via computer, steam, gas, water and oil usage to evaluate boiler efficiency and to provide supervisors with data for evaluation of operating costs.

COMPETENCIES REQUIRED

Knowledge of a building automation systems, their component parts and the mechanical equipment interfacing with it such as a digital teletype, modular console computer, display terminal, alarm and data printers, disc storage, closed circuit television, slide projector, central processor, boilers, fans, motors, air handling systems, and pneumatic controls.

Knowledge of energy management principles and techniques as they relate to environmental control of building heating, cooling, ventilation and electrical systems.

Knowledge of the fundamentals of heating, ventilating and air conditioning systems.

Knowledge of the mechanical equipment required to produce heat, steam, air conditioning and electricity, and the minimum and maximum pressure levels required to safely operate the equipment.

Knowledge of the computer programs used in the specific automation system to which assigned and the capability of the program to make corrective actions related to environmental control and security systems.

Knowledge of blueprints associated with the mechanical equipment interfacing with the building automation systems, and the procedures for reviewing them and pinpointing malfunctions.

Knowledge of the staff or manufacturer's representatives responsible for specific maintenance or emergency repairs and for those responsible for carrying out security procedures.

Knowledge of established agency procedures to be followed in emergency situations involving the need for immediate response to an alarm in the environmental control or security systems.

Knowledge of the various computer data reports and logs required such as data on preventive maintenance, equipment usage, down time, electrical peak periods, steam production and water and building temperatures.

Ability to understand and operate all component parts of a building automation system and to make modifications to the system operating program when necessary.

Ability to remain alert and to respond to emergency alarms efficiently and effectively so that all persons involved in correcting the emergency are notified and given an accurate assessment of the situation.

Ability to analyze computer printouts of building temperatures and steam production to chart energy use and costs.

Skill in the use of a teletype and computer.

Displays high standards of ethical conduct. Exhibits honesty and integrity. Refrains from theft-related, dishonest or unethical behavior.

Works and communicates with internal and external clients and customers to meet their needs in a polite, courteous, and cooperative manner. Committed to quality service.

Displays a high level of initiative, effort and commitment towards completing assignments efficiently. Works with minimal supervision. Demonstrates responsible behavior and attention to detail.

Responds appropriately to supervision. Makes an effort to follow policy and cooperate with supervisors.

Aligns behavior with the needs, priorities and goals of the organization.

Encourages and facilitates cooperation, pride, trust, and group identity. Fosters commitment and team spirit.

Expresses information to individuals or groups effectively, taking into account the audience and nature of the information. Listens to others and responds appropriately.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Successful completion of a two year Energy Technology or Energy Conservation/Management program from an area college or vocational school;

OR

one year of full-time equivalent work experience involving the set up, maintenance and/or operation of an automation or microprocessor system interfaced with mechanical, electrical, thermal, or fluid components;

full-time equivalent work experience in the operation, maintenance and/or repair of commercial, mechanical, computer, electronic or electrical equipment may substitute for the required education on a year for year basis;

OR

any equivalent combination of the above qualifying education and experience totaling two years.

NOTE:

Some positions allocated to this class may be required to work holidays, weekends or night shifts.

Effective Date: 12/10/82_____