

# **Energy Management Technician II**

## **Position Details**

Class Code: 7206

Job Family: Skilled Trades/Technicians Classification: Support Professional

Terms of Employment: Pay Grade 57 on the Support Professional Salary Schedule

FLSA STATUS: NON-EXEMPT

## **Position Summary**

Under general supervision, plans, directs, installs, operates, schedules, and performs preventative/reactive maintenance on energy management systems (EMS), heating, ventilation, air conditioning, and refrigeration (HVACR) systems, and associated controls, hardware, and software.

# **Essential Duties and Responsibilities**

This list of Essential Duties and Responsibilities is not exhaustive and may be supplemented.

- Supervises, plans, directs, and inspects the work of assigned EMS and HVACR staff.
- 2. Operates multiple computers and EMS to provide safe, comfortable learning environments while considering energy conservation-and equipment life.
- 3. Troubleshoots mechanical, electromechanical, and electronic control system malfunctions; replaces or repairs malfunctioning components (i.e., relays, printed circuit boards, etc.)
- 4. Proactively and reactively identifies faulty components; repairs instructs field personnel in repairing EMS and HVACR systems.
- Analyzes and provides technical assistance in identifying system faults of HVACR and other related equipment utilizing energy management computer systems; provides remote or on-site support to test/balance providers and commissioning agents.

- Identifies conditions contributing to energy waste; recommends efficiency
  improvements to appropriate Clark County School District staff and ensures
  systems are performing at maximum efficiency with the least amount of
  system/facility malfunctions.
- 7. Establishes energy-efficient schedules at all monitored facilities.
- 8. Inspects plans/diagrams for HVACR equipment and controls; submits modifications for proposed construction/renovations, as necessary.
- 9. Integrates life safety systems with HVACR equipment and verifies compatibility.
- 10. Confers with designers, engineers, and architects regarding new/existing HVACR designs and equipment.
- 11. Reviews and analyzes energy management data; prepares reports.
- 12. Provides technical information and recommendations for EMS controls/equipment upgrades.
- 13. Instructs District maintenance staff in EMS operation procedures (i.e., sequence of operations, programming techniques, and field service routines.)
- 14. Works with energy management contractors to ensure new equipment installations perform to specifications and all contract agreements are followed.
- 15. Provides technical assistance in designing, rebuilding, and upgrading mechanical/lighting controls.
- 16. Assists Facilities Asset Management/Facility Planning in maintaining accurate as-built drawings and records.
- 17. Provides input for the evaluation of assigned staff.
- 18. Conforms to safety standards, as prescribed.
- 19. Performs other tasks related to the position, as assigned.

## **Distinguishing Characteristics**

Plans, coordinates, installs, and maintains EMS and HVACR systems; supervises assigned staff.

# **Knowledge, Skills, and Abilities (Position Expectations)**

- 1. General knowledge of building construction.
- 2. General knowledge of mechanical and electrical system practices/procedures.
- 3. Knowledge of the characteristics and limitations of centrifugal variable volume hydronic systems, reciprocal chillers, package cooling/heating systems, boilers, pumps, and air handlers.

- 4. Knowledge of electrical control systems applicable to HVACR and lighting equipment.
- 5. Knowledge of pneumatic and electronic control systems.
- 6. Knowledge of computerized EMS.
- 7. Knowledge of HVACR trade and Environmental Protection Agency (EPA) Clean Air Act practices/procedures.
- 8. Knowledge of electrical/mechanical lockout-tag out procedures per Occupational Safety and Health Administration (OSHA) guidelines.
- Ability to recognize, understand, interpret, and apply all local, state, and national codes/regulations, including Uniform Building Code (UBC), Uniform Mechanical Code (UMC), Uniform Plumbing Code (UPC), National Electrical Code (NEC), Americans with Disabilities Act (ADA), American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAM), etc.
- 10. Ability to learn and use various operating systems (i.e., disk operating system (DOS), Operating System/2 (OS/2), Windows, Linux, etc.)
- 11. Ability to write and test modifications in multiple programming languages (i.e., computer-assisted language learning (CALL), common intermediate language (CIL), general purpose language (GPL), PASCAL, etc.)
- 12. Ability to logically troubleshoot electrical control problems.
- 13. Ability to analyze facility energy efficiency.
- 14. Ability to read and interpret mechanical/electrical drawings, prints, and schematics.
- 15. Ability to operate hand/power tools and equipment.
- 16. Ability to distinguish color-coded wires.
- 17. Ability to gain cooperation and conformance without authority.
- 18. Ability to perform mathematical calculations and analyses.
- 19. Ability to communicate clearly, verbally and in writing.
- 20. Ability to work independently.
- 21. Ability to meet predetermined deadlines.
- 22. Ability to safely move heavy objects.
- 23. Ability to work flexible hours/shifts.
- 24. Ability to withstand heights, extreme heat, and confined areas for extended periods of time.
- 25. Ability to work cooperatively with employees, students, and the public.
- 26. Ability to recognize/report hazards and apply safe work methods.
- 27. Possess physical and mental stamina commensurate with the responsibilities of the position.

## **Position Requirements**

## **Education, Training, and Experience**

- 1. High school graduation or other equivalent (i.e., General Educational Development (GED), foreign equivalency, etc.)
- 2. Six (6) years' experience maintaining and operating HVACR control systems/equipment; or,
  - Combination of experience as an EMS and HVACR technician/mechanic equivalent to six (6) years; or,
  - An associate degree from an accredited college/university in building automation/HVAC controls, mechanical operations, or engineering, and four (4) years' experience as an EMS or HVAC technician.

#### **Licenses and Certifications**

A valid driver's license or state-issued identification card.

#### **Preferred Qualifications**

- 1. Bachelor's degree from an accredited college/university in mathematics, computer science, engineering, or mechanical operations.
- 2. Knowledge of basic programming languages.
- 3. Certification as a Universal Refrigerant Handler according to 40 Code of Federal Regulations (CFR) part 82, subpart F.

# **Document(s) Required at Time of Application**

- 1. High school transcripts or other equivalent (i.e., GED, foreign equivalency, etc.)
- 2. Copy of a valid driver's license or state-issued identification card.
- 3. Transcript(s) from an accredited college/university, if applicable.
- 4. Specific documented evidence of training and experience to satisfy qualifications.

# **Examples of Assigned Work Areas**

District facilities – offices and schools, mechanical equipment rooms, and classrooms.

## **Work Environment**

#### Strength

Medium/heavy – exert force of 50-100 lbs., occasionally; 25-50 lbs., frequently; 10-20 lbs., constantly.

#### **Physical Demand**

Frequent sitting, standing, walking, pushing, pulling, stooping, kneeling, climbing, crouching, reaching, handling, and repetitive fine motor activities. Mobility to work in a typical office setting and use standard office equipment. Stamina to remain seated and maintain concentration for an extended period of time. Hearing and speech to communicate in person, via video conference and computers, or over the telephone. Vision: Frequent near/far acuity and color vision. Vision to read printed and online materials, a Video Display Terminal (VDT) screen, or other monitoring devices.

#### **Environmental Conditions**

Varies from climate-controlled office settings to work outdoors with temperatures ranging from mild/moderate to extreme cold/heat. Exposure to noise levels ranging from moderate to loud for occasional to frequent time periods.

#### **Hazards**

Furniture, playground/office equipment, communicable diseases, chemicals and fumes (as related to specific assignment), and power/hand-operated equipment and machinery (as related to specific assignment.)

# Examples of Equipment/Supplies Used to Perform Tasks

Hand/power tools (i.e., screwdrivers, wrenches, drills, saws, etc.), digital multi-meters, computers, printers, copiers, and fax machines.

#### **AA/EOE Statement**

The Clark County School District is proud to be an equal opportunity employer. The Clark County School District is committed to providing all applicants and employees equal employment opportunities without regard to race, color, religion, sex, gender identity or expression, sexual orientation, national origin, genetics, disability, age, military status, or other characteristics protected by applicable law. Here at Clark County School

District, we are a diverse group of people who honor the differences that drive innovative solutions to meet the needs of our students and employees. We believe that through a culture of inclusivity, we have the power to reflect the community we serve.

### **Job Revision Information**

Revised: 08/23/23Created: 06/26/97