COMMISSIONING TECHNICIAN I

Class Code: 7209
Job Family: Skilled Trades/Technicians
Classification: Support Professional
Terms of Employment: Pay Grade 59 on the Support Professional Salary Schedule
FLSA STATUS: NON-EXEMPT

Position Summary
Under general supervision, commissions, heating, ventilating, air conditioning, and refrigeration (HVACR), and Energy Management System (EMS) control systems by systematically verifying and documenting building energy systems for buildings and subsystems to perform interactively according to design intent and operational needs and by adjusting, maintaining, and making minor repairs, as needed.

Essential Duties and Responsibilities
This list of Essential Duties and Responsibilities is not exhaustive and may be supplemented.
1. Organizes and leads the commissioning team, in conjunction with contractors, consulting engineers, architects, Clark County School District project managers, and other District staff.
2. Facilitates and documents project requirements.
3. Verifies that the commissioning process activities are clearly stated in all scopes of work.
4. Coordinates and assists in integrating the commissioning process activities into the project schedule.
5. Prepares a commissioning plan that describes the extent of the commissioning process to accomplish project requirements and updates the plan during each phase of the project to incorporate changes and additional information.
6. Reviews and comments on the ability of the design documents to achieve the project requirements.
7. Executes the commissioning process through the writing and review of commissioning process reports, organization of all commissioning team meetings, tests, demonstrations, and training events.

8. Reviews the plans and specifications during the pre-design and design phases with respect to their completeness in all areas relating to the commissioning process, verifies that project requirements have been met; verifies that there are adequate devices included in the design to properly test the systems and assemblies; and documents the performance of each piece of equipment, system, or assembly.

9. Coordinates all document review meetings with project managers.

10. Develops the format to be used for issues logs throughout and for each phase of the commissioning process.

11. Reviews the systems manual to verify that it achieves the project requirements.

12. Oversees system and assembly testing and verifies the results to include a summary of deficiencies.

13. Coordinates commissioning team members in completion of all tests.


15. Operates computers and energy management operating systems to verify and obtain the most efficient balance between school comfort, energy conservation, and equipment life.

16. Inspects and identifies conditions that contribute to energy waste and makes recommendations to directors, principals, managers, custodians, and other District staff to improve energy efficiency and ensure systems are performing to maximum efficiency with the least amount of system/facility malfunctions.

17. Analyzes and provides technical assistance in identifying system faults and malfunctioned HVACR and other related equipment utilizing energy management computer systems.

18. Integrates life safety systems with HVACR equipment to ensure compatible operations.

19. Instructs District maintenance staff in energy management systems operation procedures (i.e., facility sequence of operations, programming techniques, and field service routines).

20. Conforms to safety standards, as prescribed.

21. Performs other tasks related to the position, as assigned.
Distinguishing Characteristics

Involves the planning, coordinating, and implementation of the energy conservation program and supervising and scheduling of assigned staff.

Knowledge, Skills, and Abilities (Position Expectations)

1. General knowledge of building construction.
2. Thorough knowledge of mechanical, HVAC, and energy management systems and associated control systems practices and procedures.
3. General knowledge of electrical systems practices and procedures.
4. Thorough knowledge of the characteristics and limitations of variable volume hydronic systems, centrifugal and reciprocal chillers, package cooling/heating systems, boilers, pumps, and air handlers.
5. Knowledge of electrical control systems as applied to cooling and heating equipment.
6. Knowledge of pneumatic and electronic control systems.
7. Knowledge of computerized energy management systems.
8. Knowledge of practices and procedures of the HVAC trade and Environmental Protection Agency (EPA) clean air act.
9. Knowledge of electrical and mechanical lockout/tag-out procedures per Occupational Safety and Health Administration (OSHA) guidelines.
10. Ability to recognize, understand, interpret, and apply all local, state, federal, and national codes and regulations including, but not limited to: 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 (ASHRAE), etc.
11. Ability to learn and use various operating systems (i.e., Disc Operating System (DOS), Operating System 2 (OS2), etc.).
12. Ability to write and test modifications in multiple languages of software systems (i.e., Graphics Applications Programming Language (GPL) and BASIC programming, etc.).
13. Ability to logically troubleshoot electrical or electronic control problems.
14. Ability to analyze facility, systems, and equipment energy efficiency.
15. Ability to read and interpret mechanical and electrical drawings, prints, and schematics.
16. Ability to operate hand and power tools and equipment.
17. Ability to distinguish color-coded wires.
18. Ability to gain cooperation and conformance without authority.
19. Ability to perform mathematical computations and analysis.
20. Ability to communicate clearly orally and in writing.
21. Ability to work independently.
22. Ability to meet predetermined deadlines.
23. Ability to safely move and relocate heavy objects.
24. Ability to work flexible hours or shifts.
25. Ability to withstand heights, extreme heat or cold, and confined areas for extended periods of time.
26. Ability to work cooperatively with employees, students, and the public.
27. Ability to recognize and report hazards and apply safe work methods.
28. 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. An associate’s degree in HVACR mechanical operations or engineering; plus, six (6) years combined experience as a commissioning technician and/or an energy management technician; or, Ten (10) years experience in the maintenance and operation of HVACR control systems and equipment; or,
A combination of ten (10) years experience as a commissioning technician, an energy management systems technician, and/or HVACR technician; or,
Ten (10) years experience as a Clark County School District Energy Management Technician I or Energy Management Technician II.
3. Successful completion of a nationally recognized course of instruction on the commissioning process within five (5) months of employment.

Licenses and Certifications

1. A valid driver’s license that allows the applicant/employee to legally operate a motor vehicle in Nevada. License must be maintained for the duration of the assignment.
2. Copy of current driving history (dated within six (6) months from the date printed) issued by the Department of Motor Vehicles at time of application or Qualified Selection Pool (QSP) placement and at time of interview prior to final selection.
Preferred Qualifications
1. Bachelor’s degree in mathematics, computer science, engineering, or mechanical operations.
2. Knowledge of micro/minicomputer basic languages for programming purposes.
3. Certification as a Universal Refrigerant Handler in accordance with Environmental Protection Agency (EPA) Federal Regulation Title 40, Part 82, obtained through an approved EPA technician certification program.
4. Certification as a Commissioning Process Provider upon successful completion of the test from a nationally recognized course of instruction on the commissioning process.

Document(s) Required at Time of Application
1. High school transcript or other equivalent (i.e., GED, foreign equivalency, etc.).
2. College transcript(s), if applicable.
3. A valid driver’s license that allows the applicant/employee to legally operate a motor vehicle in Nevada.
4. Copy of current driving history (dated within six (6) months from the date printed) issued by the Department of Motor Vehicles.
5. Specific documented evidence of successful completion of a nationally recognized course of instruction on the commissioning process as indicated above, if applicable.
6. Specific documented evidence of training and experience to satisfy qualifications.

Examples of Assigned Work Areas
Clark County School District facilities – offices, schools, classrooms, and mechanical equipment rooms.

Work Environment

Strength
Strength: Medium/Heavy - Exert force 50-100 lbs., occasionally; 25-50 lbs., frequently; or 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 and 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 a climate-controlled office setting 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
District-issued/personal vehicles, hand and power tools (i.e., screwdrivers, wrenches, drills, saws, etc.), digital multimeters, air and water flow measuring devices, various computers, printers, copy machines, fax machines.

AA/EOE Statement
This employer does not knowingly discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity or expression, age, disability, or national origin.

Job Revision Information
- Revised: 01/27/20
- Created: 04/16/12