

SENIOR ENERGY SPECIALIST

DEFINITION

Supervises and participates in the compilation, analysis, and evaluation of cost and usage data and reports relative to energy and water conservation programs, renewable energy programs, greenhouse gas emissions accounting, and coordinates the installation and operation of computer based environmental control systems.

TYPICAL DUTIES

- Supervises and participates in the analysis and evaluation of District energy, greenhouse gas emission patterns, and water usage patterns.
- Projects the District's annual utility expenditures and analyzes cost impact of rate increases.
- Monitors and evaluates computer based environmental control systems for optimal operation of building systems equipment, including heating, ventilating, and air conditioning equipment, domestic and irrigation water, and renewable energy.
- Coordinates federal and State energy conservation, renewable energy, and carbon emissions reduction grant applications and programs.
- Coordinates feasibility studies for the design of energy efficient and low carbon buildings and purchase of energy, low carbon, and renewable energy efficient equipment, and analyzes financial benefits.
- Prepares and submits reports for District participation in public and private utilities rebate programs.
- Reviews and evaluates consultants' feasibility studies for carbon reduction, conservation and cost effectiveness.
- Evaluates the feasibility of implementing projects, such as thermal energy storage, cogeneration, and waste heat recovery systems.
- Consults with public and private agencies and District personnel in planning, designing, and implementing energy and water conservation and carbon reduction measures.
- Plans and presents energy and water conservation and carbon reduction programs to students and District staff.
- Evaluates and recommends products for energy and water efficiency and carbon reduction.
- Analyzes energy and water usage and carbon emissions at sites with environmental control systems for conformance with District energy and water conservation and carbon reduction standards.
- Revises equipment specifications for conformance with conservation and carbon reduction requirements.
- Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

The Senior Energy Specialist supervises and participates in the planning, development, analysis, and evaluation of energy and water conservation programs, renewable energy programs, and greenhouse gas emissions reduction programs.

The Energy and Sustainability Program Manager develops and executes District-wide energy and sustainability programs and initiatives to address construction and operational issues in energy use, resource conservation, pollution, waste reduction, and reliance on landfills.

An Energy Specialist assists administrators in the management of energy and water retrofit projects and analyzes District energy and water consumption, monitors conservation projects, and arranges and presents energy conservation programs.

SUPERVISION

General direction is received from higher-level administrators within the Eco-Sustainability Office. Supervision is exercised over Energy Specialists and program support staff. Functional supervision is exercised over the standards, methods, and materials used by personnel in implementing the District's energy conservation program.

CLASS QUALIFICATIONS

Knowledge of:

- Principles and methodologies of greenhouse gas emissions accounting and carbon footprint reduction.
- Principles of renewable energy generation calculations and optimization
- Expertise in energy modeling and building simulations, including familiarity with the leading building simulation software and graphic presentation of results
- Principles related to all building systems that consume or generate energy or water, including heating, ventilation, and air-conditioning systems, as well as factors affecting energy and water consumption.
- Principles of heating, ventilation, and air-conditioning systems
- Principles of electricity, natural gas, and water distribution
- Principles of determining various types of energy usage and factors that affect consumption
- Utility rate schedules and billing procedures
- Principles of budgeting and cost benefit analysis
- Computer systems and procedures design, analysis, and application
- Sources of data on varieties of energy conservation projects
- Laws, ordinances, and safety regulations relative to electrical, heating, ventilation, air conditioning, and plumbing systems and related equipment
- Statistics and research methodology
- Principles of supervision

Ability to:

- Analyze and optimize energy usage, implement cost-saving measures, and project utility expenditures effectively.
- Prepare life cycle cost assessments.
- Plan and implement greenhouse gas emissions accounting programs.
- Oversee multiple initiatives, prioritize tasks, and manage budgets.
- Read plans, specifications, and other technical materials relating to electrical and mechanical design
- Make effective presentations and recommendations using tables, charts, and graphs
- Express difficult and complex concepts clearly and concisely in oral and written form
- Conduct and participate in meetings involving technical subjects
- Analyze data on energy, consumption, and costs and identify present and potential problems and other possible areas for conservation and savings
- Work effectively with representatives of government agencies, private contractors, facilities designers, equipment manufacturers, and District administrators and other school personnel
- Plan and implement voluntary conservation incentive programs

Supervise effectively

ENTRANCE QUALIFICATIONS

Education:

Graduation from a recognized college or university with a bachelor's degree, preferably in architecture, engineering, energy management, or building science, supplemented by coursework in statistics, energy management, energy auditing, building systems engineering, , or cost analysis. Additional qualifying experience may be substituted for up to two years of the required education on a year-for-year basis, supplemented by coursework in statistics, energy management, energy auditing, building systems engineering, , or cost analysis.

Experience:

Three years of experience coordinating a program or project relating to energy conservation, or related areas, preferably in a school district environment. This experience must include responsibility for data analysis, cost estimation, monitoring building systems or the preparation of reports.

Special:

Professional designation as a Certified Energy Manager (CEM) is preferable.

A valid driver's license to legally operate a motor vehicle in the State of California and the use of a motor vehicle, or the ability to utilize an alternative method of transportation.

This class description is not a complete statement of essential functions, responsibilities, or requirements. Entrance requirements are representative of the minimum level of knowledge, skill, and /or abilities. To the extent permitted by law, management retains the discretion to add or change typical duties of a position at any time, as long as such addition or change is reasonably related to existing duties.

Revised
12-19-24
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