

GUILFORD COUNTY SCHOOLS JOB DESCRIPTION

JOB TITLE: ENERGY ENGINEER

GENERAL STATEMENT OF JOB

Under limited supervision, this position is responsible for the management of the energy management program. Work involves maintenance of the database of utility expenses, ensuring regulatory compliance, service contract negotiations, technical assistance to departments related to energy (usage and expense), ensuring general Department of Energy regulatory compliance, and field audits/investigations. Collaborates with HVAC, Electrical, and Plumbing associates on the development, installation, maintenance, and control of energy efficient systems. Employee must exercise considerable tact and courtesy in frequent contacts with school officials, district staff, and the general public. Employee reports to the Director of Maintenance.

SPECIFIC DUTIES AND RESPONSIBILITIES

ESSENTIAL JOB FUNCTIONS

Serves as project engineer in the design and review of moderately complex energy conservation projects.

Reviews GCS needs and requirements in order to refine the definition of the Program.

Evaluates design and cost proposals for energy conservations projects.

Provides regular progress reports as to the overall effectiveness of the energy management program.

Records progress of the project and submit written progress reports.

Recommends sound policies directed toward energy conservation.

Develops short and long-range District energy conservation plans.

Prepares energy related presentations.

Prepares and presents reports to Guilford County Schools and other governmental entities as required through duration of the Program.

Ensures energy management operations are supportive of the instructional goals of the district.

Trains the appropriate staff and faculty regarding energy management goals and procedures.

Articulates the district's mission and goals in the area of energy management to the community and solicits its support in realizing the mission.

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Maintains liaison with the Maintenance/Operations Department and Principals and their staff in order to provide optimum facility comfort while reducing energy consumption levels.

Utilizes consultants when necessary to identify energy conservation measures.

Monitors facility design and construction activities as it relates to energy management.

Reviews and negotiates energy purchase agreements and make recommendations regarding energy fuel selection.

Coordinates the procurement of District energy.

Acts as contract administrator for all energy-related contracts including purchasing contracts and franchises fee.

Evaluates and recommends software and/or systems to support the District's energy conservation programs.

Writes and submits Federal/State proposals for energy conservation and alternate fuel programs and grants.

Ensures that energy audits are conducted.

Analyzes utility bills to determine energy usage trends and loads profiles to identify energy or cost saving opportunities.

Compiles utility budgets and energy conservation measure cost estimates based upon documented program needs.

ADDITIONAL JOB FUNCTIONS

Performs other related work as required.

MINIMUM TRAINING AND EXPERIENCE

Bachelor's degree in mechanical, electrical engineering or business administration with five to seven years of experience in energy management preferred.

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SPECIAL REQUIREMENTS

Possession of a valid driver's license issued by the state of North Carolina. An employee assigned to this position is designated as Category "A." Category "A" employees are governed by Guilford County schools Policy GA and Administrative Procedure GA-P, "Drug and Alcohol Free Workplace," which spells out specific drug testing requirements, procedures and consequences of positive alcohol or drug tests or arrest for alleged violation of any alcohol or drug-related offense.

KNOWLEDGE, SKILLS AND ABILITIES

Thorough knowledge of HVAC, electrical and plumbing systems and the processes of efficient energy.

Thorough knowledge of automatic control systems for buildings including remote building monitoring and operation.

Knowledge and understanding of 'Deregulated Energy' and the ability to direct the purchase of energy from alternate sources.

Knowledge of building, fire and life safety codes.

Knowledge of OSHA regulations.

Knowledge of Federal & State Energy Codes and Practical Applications.

Ability to utilize energy management control systems efficiently and train and direct others in the proper operation and utilization of systems.

Ability to analyze utility reports to identify energy or cost saving opportunities.

Ability to develop and administer construction contracts and other service agreements.

Ability to maintain, manage and prepare reports and records.

Ability to train staff.

Ability to communicate clearly and concisely, both orally and in writing.

Experience in Auto Cad Systems.

Proficiency in Microsoft Office software.

Proficiency in energy management related software.

Proficiency in energy cost calculations.

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MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS

Physical Requirements: Must be physically able to operate a variety of automated office machines including audio-visual equipment, computers, calculators, printers, copiers, etc. Must be able to exert up to 30 pounds of force occasionally and/or negligible amount of force frequently or constantly to lift, carry, push, pull, or otherwise move objects. Light work usually requires walking or standing to as significant degree.

Data Conception: Requires the ability to compare and/or judge the readily observable, functional, structural, or composite characteristics (whether similar to or divergent from obvious standards) of data, people, or things.

Interpersonal Communications: Requires the ability to speak and/or signal people to convey or exchange information. Includes receiving instructions, assignments, and/or directions from supervisors.

Language Ability: Requires the ability to read correspondence, reports, forms, billing statements, invoices, financial statements, evaluations, rosters, insurance forms, turnaround documents, etc. Requires the ability to prepare correspondence, forms, reports, evaluations, etc., using prescribed formats and conforming to all rules of punctuation, grammar, diction, and style. Requires the ability to speak to people with poise, voice control, and confidence.

Intelligence: Requires the ability to apply rational systems to solve practical problems and deal with a variety of concrete variable in situations where only limited standardization exists; to interpret a variety of instruction furnished in oral, written, diagrammatic or schedule form.

Verbal Aptitude: Requires the ability to record and deliver information, to explain procedures, to follow oral and written instructions. Must be able to communicate effectively and efficiently in standard English and government terminology.

Numerical Aptitude: Requires the ability to utilize mathematical formulas; to add and subtract totals; to multiply and divide; to determine percentages and decimals; and to apply the theories of algebra/statistics.

Form/Spatial Aptitude: Requires the ability to inspect items for proper length, width, and shape.

Motor Coordination: Requires the ability to coordinate hands and eyes rapidly and accurately in using automated office equipment or tools of the position.

Manual Dexterity: Requires the ability to handle a variety of items, office equipment, etc. Must have minimal levels of eye/hand/foot coordination.

Color Discrimination: Does not require the ability to differentiate between colors and shapes of color.

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Interpersonal Temperament: Requires the ability to deal with people beyond giving and receiving instructions. Must be adaptable to performing under minimal levels of stress and when confronted with persons acting under stress.

Physical Communication: Requires the ability to talk and hear: (Talking: expressing or exchanging ideas by means of spoken words. Hearing: perceiving nature of sounds by ear). Must be able to communicate via telephone.

DISCLAIMER

The preceding job description has been designed to indicate the general nature and level of work performed by an employee within this classification. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities, and qualifications required of an employee to do this job.