

**MAJOR FUNCTION**

This is professional level analytical and technical work providing energy end-users with assistance in the design, procurement, installation, operation, and maintenance of energy consuming systems for their premises to achieve the energy efficiency goals of the customer and the City. Employees assigned to positions in this class also participate in the wholesale energy market activities for developing and evaluating programs and strategies relative to the supply aggregation, management, acquisition and marketing of utility fuels and electricity. Work is performed under the general direction of the division director. However, the employee is expected to exercise considerable independence, initiative and professional discretion in the performance of duties. Work is reviewed through conferences, reports, observations and results obtained.

**ESSENTIAL AND OTHER IMPORTANT JOB DUTIES****Essential Duties**

Provides technical assistance to customers and City staff in relation to energy efficiency programs and opportunities. Advises customers on installations of heating ventilation and air conditioning (HVAC), thermal storage, photovoltaic (PV), and solar energy systems. Evaluates the benefits of, and oversees the installation and maintenance of renewable energy projects such as PV Systems, Fuel Cells, and Solar Energy Systems. Evaluates and promotes energy efficiency upgrades of buildings and equipment, including demand-side energy-efficiency projects, such as thermal storage, HVAC and other energy-driven equipment to conserve energy. Establishes and maintains communication with existing and potential large utility customers in regard to equipment or operational efficiencies and utility rates with the purpose of customer service and retention. Studies customer load patterns and makes recommendations for possible load aggregations and time of use adjustments which can benefit the customer. Assists customers in communications with equipment vendors and/or energy service companies (ESCOs). Maintains contacts/dialogs with ESCOs, architects, engineers, and contractors and keeps up with developments in the energy conservation and utility management industry. Encourages the development of energy-efficient buildings; in doing so, helps to shape the customer's load for the benefit of the customer and utility provider. Provides information on the potential for customer end-use equipment to electric and gas utility systems for incorporation in load forecasting. Evaluates energy-efficient products on the market for inclusion as demand-side resources. Participates in and prepares/presents expert testimonies on subjects in area of responsibility. Participates and assists in contract, method, policy development, and program implementation for wholesale energy or utility resources and facility planning. Develops models and software tools for the evaluation of wholesale energy transactions. Performs related work as required.

**Other Important Duties**

Prepares short-term weather and demand forecasts for use in wholesale marketing. Attends external and/or city sponsored developmental opportunities to increase general and specific knowledge base. Performs related duties as required.

**DESIRABLE QUALIFICATIONS****Knowledge, Abilities and Skills**

Thorough knowledge of the principles, practices and methods used in the electric utility industry, power generation, thermal systems, HVAC/mechanical systems, renewable energy, and energy conservation. Thorough knowledge of the components of mechanical systems that may be used in various types of buildings, including HVAC, lighting, solar , photovoltaic systems, and electrical generators. General knowledge of the natural gas and electricity physical and financial markets. Ability to prepare and present technical reports, and analyze data. Ability to communicate effectively, orally and in writing. Ability to establish and maintain effective working relationships as necessitated by the work. Highly developed skills in use of computers and associated programs and applications for technical and economic analysis.

Minimum Training and Experience

Graduation from a four year college or university with a degree in mechanical or electrical engineering and four years of technical and professional experience that includes electric utility operations; electric generation resource planning, power plant engineering; or HVAC engineering, design, and maintenance; or an equivalent combination of training and experience.

Note: Preference may be given to applicants with experience or coursework in computer programming, power plant operations, thermal systems operations, or statistical analysis.

Established: 05-03-02  
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