

MAJOR FUNCTION

This is responsible technical work involving the operation and control of the City's electrical system using the Supervisory Control and Data Acquisition/Energy Management System (SCADA/EMS). Work involves the responsibility for monitoring and controlling, by way of complex computer-directed equipment, the electrical generation, transmission and distribution facilities of the City's electric utility system on an assigned shift. Duties are generally performed in accordance with well-established policies and operating procedures, but employees are expected to exercise skilled independent judgment in handling unexpected or emergency situations. Work is reviewed through observations, inspections and results obtained.

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

Operates all equipment in the monitoring and controlling of the electric generation, transmission and distribution systems in compliance with all applicable policies and procedures issued by the North American Electric Reliability Council (NERC). Exercises authority over all system personnel in the implementation of real-time actions that ensure the stable and reliable operation of the Bulk Electric System. Schedules and coordinates all switching on the system involving removal from or return to service of transmission and distribution circuits, substations, transformers, etc. Schedules power interchange with other utilities on hourly basis according to economic factors, operation conditions, system requirements and capabilities. Evaluates electronic tags for energy transactions for reliability and accuracy of data. Monitors Open Access Same Time Information System (OASIS) for transmission requests. Updates available transmission postings and complies with Federal Energy Regulatory Commission (FERC) Orders 888 & 889. Monitors and regulates system frequency and transmission, distribution, circuit flows, voltages and system and unit power factors. Monitors the frequency, voltages, real power flows, reactive power flows, and amperes on each of the City's electric substations. Coordinates and implements approved switching orders for transmission and distribution lines and associated equipment. Implements and controls interconnected utility communication over the Florida Transaction Management System (FTMS) and Florida Hotline. Monitors and regulates energy flow within system and over the interconnections. Monitors weather conditions by weather radar, lightening detection and tracking system, weather station and broadcast media for local forecast and inclement conditions. Schedules and coordinates outage of generating, transmission and control facilities with operating and maintenance personnel and with interconnected utilities. Develops and carries out switching orders as required during normal and abnormal system conditions. Controls generating units, transmission switches and breakers and load tap-changing transformers. Takes independent actions to maintain reliability, up to and including dropping firm customer load, without obtaining approval from higher level personnel. Complies with requests from the Florida Reliability Coordinating Council Security Coordinator (FRCC). Performs calculations, enters data and maintains records and logs as required, manually or on computers. Handles service calls and communicates using telephones, two-way radios, satellite phone, power line carriers and computer terminals. Works on a rotating shift. May assume responsibility for center operations in the absence of the Assistant Chief System Operator. Performs related work as required.

Other Important Duties

Assists utility customers with general complaints and make referrals as necessary for resolution of specific problems. During nights and weekends, may review customer accounts to determine if service has been improperly interrupted and may take emergency measures to restore service if necessary. Performs related work as required.

DESIRABLE QUALIFICATIONS

Knowledge, Abilities and Skills

Considerable knowledge of the principles of electrical theory as applied to electrical circuits, wiring systems, power dispatching, transmission and distribution systems. Considerable knowledge of the relationships of power dispatching and distribution functions of the entire electrical generation, transmission and distribution systems. Considerable knowledge and understanding of the occupational hazards involved in working with generation facilities, high-voltage lines, transmission and distribution equipment. Considerable knowledge of electrical theory as it pertains to load-flows, frequency maintenance of interconnections and system stability. Considerable knowledge of the NERC Operating Policies and basic principles of interconnected operations. Knowledge of modern digital computer operations and theory. Ability to follow complex oral and written instructions. Ability to keep complex operating records and to prepare reports on operations. Ability to communicate effectively, orally and in writing. Ability to maintain working relationships as necessitated by the work. Ability to use microcomputers and the associated programs and applications necessary for successful job performance.

Minimum Training and Experience

Possession of a high school diploma or an equivalent recognized certificate and four years of experience that includes electric utility production and or transmission and distribution system operation; or an equivalent combination of training and experience.

Necessary Special Requirement

Possession of North American Electric Reliability Council (NERC) System Operator Certificate within 9 months from date of hire, a condition of continued employment.

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