

ENERGY CONTROL CENTER OPERATOR

JOB DESCRIPTION

Classification Responsibilities: The Energy Control Center (ECC) Operator is responsible for monitoring and controlling the City of Mesa's (COM) electric transmission and distribution system under limited supervision. The operator performs complex duties including, but not limited to: monitoring the electrical system's status using a Supervisory Control and Data Acquisition (SCADA) system; analyzing system data to determine necessary action; regulating electrical flow across the system in response to issues, emergencies, or maintenance; balance system loading to ensure power delivery meets customer demand; dispatching resources to emergency and non-emergency situations involving the system; coordinating system maintenance and repair work with field operations personnel; directing electrical switching activities; authorizing equipment tagging; issuing system clearances; collecting, logging, and recording system data; communicating system status updates and data to field operations personnel using a Very High Frequency (VHF) radio and telephone; and preparing operational and historical records. Other duties may be assigned.

The ECC Operator is also responsible for preparing, checking, and directing the execution of safe and reliable switching procedures for both City personnel and in coordination with interconnected utilities or similar entities. The preparation, verification, and execution of switching procedures are vital to ensure the safe operation of the control center and the broader electric grid. These procedures are especially crucial when performing maintenance, troubleshooting faults, or responding to emergency situations. The individual in this role will be responsible for ensuring all switching operations are conducted in strict compliance with safety protocols and industry standards, both for the safety of City personnel and to minimize the risk of disruptions to the interconnected utility grid. Coordinating with external utilities is also a necessary component of this role. The individual must manage and direct switching operations that impact not only City assets but also the interconnected grid. This often involves working closely with other utilities to prevent system overloads, ensure seamless transitions during outages, and maintain grid stability. This level of coordination requires strong technical expertise and the ability to communicate effectively with external partners.

The ECC Operator has full authority to take reasonable action necessary to ensure the safe, efficient, and reliable operation of the COM's electric power system. The operator will use the Outage Management System (OMS) for electrical system outage reporting and restoration, to achieve optimum service excellence levels, as measured by System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) metrics.

Distinguishing Features: This class reports to the Electric Substation Supervisor. Employees in this class may be required to be on-call and are subject to standby and callouts (example: working varying shifts, extended workdays, weekends, and holidays). Employees in this class are expected to work calmly under demanding conditions, without compromising safety and system reliability. This class is FLSA non-exempt.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required. High school diploma or equivalent. Three (3) years' experience as a high voltage power system electrical journeyman, including two (2) years' experience as a high voltage power system Control Room Operator or Dispatcher.

Special Requirements. Must possess a valid Class D Arizona Driver's License by hire or promotion date. Must reside within the City of Mesa Electric Utility call-out area within one year after hire or promotion date.

Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures.

Preferred/Desirable Qualifications. Familiar with electrical system operating software including but not limited to SCADA, GIS (geographic information system), AutoCAD, and OMS. Familiarity with distribution system interruption data, power system interruption and outage reporting, and IEEE performance indices and the related software.

ESSENTIAL FUNCTIONS

Communication: Responds to incoming customers, field personnel, utilities emergency calls, and trouble calls. Answers questions regarding electric system practices and procedures. Relays information to other City employees to resolve utilities and related problems. Maintains reports on essential electric system data. Provides essential information to other utility employees.

Manual/Physical: Enters data and information into a terminal or personal computer or other keyboard device to produce documents, databases, and reports. Familiar with the operation of SCADA and OMS systems. Familiar with multi-channel radio base station, a digital voice and video recorder, and multi-line telephone. Operates a variety of office equipment such as a fax, scanner, and copier. Moves light objects of less than 20 pounds in a typical office environment. Operates a motor vehicle requiring a standard Class D Arizona Driver's License to attend meetings or visit field operations.

Mental: Reviews system reports, customer contacts, and radio logs to ensure conformance to standards. Develops and updates procedures and protocols to ensure effective utilization of an energy control center. Resolves work procedural problems and questions presented by Energy Resources and subordinate personnel. Provides input and support in preparing and managing the control center operating and maintenance budget. Coordinates with the SRP Transmission Operations, through SRP's Distribution System Operators to restore the transmission system following a major system disturbance, islanding, or blackout event. Understands verbal and/or written instructions. Comprehends and makes inferences from written material. Reads operating reports and diagnoses possible causes of problems.

Knowledge and Abilities:

Knowledge of:

control room power system operating practices;
computer system report generation, data collection, and conversion;
emergency call out and notification procedures;

Microsoft Word, Excel, and Outlook to produce reports and enter historical data to file;
general operating procedures for a VHF radio system;
the principles of operation of a SCADA system;
basic power system electrical concepts and reading blueprints and schematics; and
general safety protocols and industry rules and practices.

Ability to:

operate a power SCADA system, GIS, AutoCAD and OMS systems;
operate power system VHF radio and telephone systems;
recommend electric system operating procedures including contingency plans and standard operating procedures (SOP);
perform a variety of tasks as part of a team;
evaluate information and make decisions in a timely manner, during situations that may be moderately to extremely stressful;
establish and maintain effective working relationships with field crews, management, and other COM department personnel, customers, SRP Transmission Operators, and other entities;
perform math functions to calculate fractions, percentages, and decimals;
clearly and effectively communicate with other departments within the COM, customers, SRP Transmission Operators, and any other affected entities, both verbally and in writing; and
work independently in the performance of routine operating duties and during emergencies.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the COM and as the needs and requirements of the job change.

New 03/25

KK/sb/lv

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EEO-SCW

JOB FCTN-TRA

Non-DOT Safety and Security-Y

CDL-N

RESP-N

PAY GRADE: 56

IND-7539

SWORN-No

Non-DOT Random-N

DOT-N

INCREMENTS 59-200