



Job Descriptions

In accordance with its Standards of Conduct Implementation and Compliance Procedures, City Utilities of Springfield, Missouri will post on these pages the job titles and job descriptions of its Transmission Function Employees.

Title & Job Functions:

Transmission Function Employees

Director – Power System Control

PURPOSE OF POSITION:

Responsible for all activities of the Power System Control Center including generation, transmission and distribution control, compliance with applicable industry standards, training, operations support, budgeting and personnel management. Manages interaction with internal departments and external entities for operations and financial planning purposes related to the effective and economical operation of City Utilities electric system.

ESSENTIAL JOB FUNCTIONS:

1. Sets policy and oversees the reliable control of electric transmission and distribution systems and operation of City Utilities' generation assets.
2. Ensures adherence to all applicable regulations and procedures governing Transmission Operations, particularly North American Electric Reliability Corporation (NERC) Reliability Standards, Federal Energy Regulatory Commission (FERC) Standards of Conduct, and Southwest Power Pool (SPP) Criteria.
3. Manages collection and retention of evidence to document compliance with auditable requirements.
4. Establishes policy for planning and approving all non-emergency switching schedules, including creation and implementation.
5. Supervises maintenance and support of communication and computer tools to enable Transmission and Generation monitoring and control, particularly the Energy Management System (EMS).
6. Supervises collection, consolidation, and reporting of hourly generation, interchange, and system load for energy accounting and statistical reporting purposes internally and with Southwest Power Pool and NERC.
7. Manages data collection and reporting to SPP Transmission Tariff Operations to support SPP's provision of transmission service using City Utilities transmission assets. Reviews, verifies and reports revenue from SPP to appropriate City Utilities' departments and personnel.
8. Coordinates with Transmission and Resource Planning to identify and address electric system reliability concerns.
9. Oversees collection and reporting of hourly meter readings and other data for all City Utilities' generation resources, interchange points, and loads registered in the SPP Market.

10. Administers plans and operator tools for Transmission System Operations, System Operator Training, Voltage Control, Emergency Operations, Load Shedding, System Restoration, and Backup Control Center Operations.
11. Oversees employee training to enhance performance and ensure competence in the following areas: power system operations, NERC Standards compliance, FERC Standards of Conduct compliance, and City Utilities' Policies and Procedures.
12. Represents City Utilities' operating interests at appropriate regional and national committees.
13. Analyzes personnel needs. Assures adherence to utility policy, safety operating rules, and non-discrimination/Affirmative Action Plans. Supervises, evaluates, and assists all Power System Control employees.
14. Prepares and administers the budget for area of responsibility.
15. Performs related duties as required or assigned by management.

Manager – Power System Operations

PURPOSE OF POSITION:

Under the direction of the Director-Power System Control, manages all reliability functions of the Power System Control Center. The Power System Control Center is responsible for continuously monitoring and controlling the operation of City Utilities' Electric Generation, Transmission, and Distribution equipment. The primary objective of this position is to ensure the safe and reliable operation of these systems on a continuous basis to maximize safety and reliability.

ESSENTIAL JOB FUNCTIONS:

1. Acts as lead Power System Operator in developing and overseeing procedures, listening to and addressing reliability concerns, and managing work schedules. Supervises Power System Operators and Power System Operator-Trainees, and evaluates performance on a continuous basis.
2. Responsible for reviewing and updating all Power System Control Operating Procedures, including Voltage Control, System Restoration, Load Shed, and Emergency Operating Procedures.
3. Coordinates with Manager-Reliability Compliance to complete compliance surveys and prepare for reliability audit activities.
4. Participates in NERC and regional compliance activities, including certifications and audits.
5. Represents City Utilities at relevant national and regional committees and meetings.
6. Coordinates planned transmission switching with Electric T&D and creates switching schedules for planned transmission outages.
7. Coordinates planned generation outages with the power stations and City Utilities Power Marketing.
8. Coordinates planning and reporting of generation and transmission outages with neighboring Transmission Operators and Reliability Coordinators.
9. Works with EMS Coordinator to develop tools for the Power System Operators and oversees implementation of new functionality.
10. Coordinates with Power System Trainer to ensure that Power System Operators receive training to maintain NERC certification and ensure adequate preparation for implementing new processes and tools.
11. Responsible for filing required reliability reports with SPP and NERC.
12. Performs other related duties as required or assigned by management.

Power System Operator/Dispatcher

PURPOSE OF POSITION:

Under the direction of Manager-Power System Operations or designee, controls generation, and monitors tie line flow to meet SPP Integrated Marketplace demands. Monitors status of City Utilities' transmission and distribution systems and operates switching to ensure safety and provide continuous service.

ESSENTIAL JOB FUNCTIONS:

1. Learns and follows North American Electric Reliability Corporation (NERC) reliability standards. Must retain NERC Operator Certification for Balancing & Interchange and Transmission Operators.
2. Takes responsibility and authority to operate City Utilities' electric system in a safe and reliable manner, in accordance with NERC reliability standards. This authority includes directing City Utilities' personnel to take actions to protect the integrity of the bulk electric system.
3. Learns and follows City Utilities' Standards of Conduct concerning treatment of transmission operating information.
4. Operates computerized Energy Management System (EMS) to include data input, changeover, and recovery during malfunctions. Many specific tasks are accomplished through the EMS system. Monitors and reports any changes or inconsistencies in maps and/or operating information.
5. Observes load and voltage to ensure adequate supply and distribution of electricity to meet power demands. Contacts power stations for increase or decrease in watts and vars.
6. Monitors SPP Integrated Marketplace market interface for unit commitment Start/Stop notices, and notifies power stations of status changes in a timely manner.
7. Follows a schedule of power transfer, as determined by the SPP Integrated Marketplace, with the interconnected electric system to ensure compliance with NERC reliability standards during normal and emergency operations.
8. Ensures generators are loaded in accordance with operational constraints.
9. Keeps constantly informed via telemetry of conditions throughout the system. Maintains record of hourly system readings. Ensures real-time electronic transmittal to The Energy Authority, City Utilities' marketing affiliate, of information regarding the availability of City Utilities' generation resources. Prepares monthly operational reports. Keeps other necessary records.
10. Coordinates connection/disconnection of generating units with applicable power station personnel and with the SPP Balancing Authority and Reliability Coordinator. Communicates with field personnel and maintains action logs for hold and clearance logs.
11. Reports known and suspected problems with EMS and performs minor equipment maintenance.
12. Controls and monitors all high voltage switching to include the removal from service and restoration to service of lines and equipment requiring repair or maintenance. Reports and coordinates all transmission outages for facilities rated 100kV and above with the Reliability Coordinator.
13. Takes trouble calls and coordinates corrective action with field personnel during off-hours for the electric system.
14. Takes all prudent action to restore service in a timely manner following outages and to minimize the effect of emergencies. Ensures, on a real-time basis, that the system is operated safely. Ensures all switching procedures are implemented per plan to ensure safety of the public and City Utilities' crews and maintain system integrity.
15. Initiates appropriate emergency procedures, when directed or when necessary, based upon own judgment. Initiates Backup Control Center operation when conditions warrant. Notifies appropriate duty personnel when additional assistance is needed.
16. Performs other related duties as required or assigned by management.

Power System Operator/Dispatcher – Trainee

PURPOSE OF POSITION:

Under the direction of Manager-Power System Operations or designee, completes training for the North American Electric Reliability Corporation (NERC) System Operator Certification Examination. This training will consist of on-the-job training in coordination with Power System Control personnel and independent study of NERC Reliability Standards. Once the trainee has completed the necessary training and certification requirement and received a satisfactory rating on their performance review, they will advance to Power System Operator/Dispatcher

ESSENTIAL JOB FUNCTIONS:

All control actions on the electric system will be done under the supervision of the Manager-Power System Operations or certified Power System Operator/Dispatcher in accordance with NERC Standard PER-003-0.

1. Learns and follows North American Electric Reliability Corporation (NERC) reliability standards. Must obtain NERC System Operator Certification within six months of employment.
2. Takes responsibility and authority to operate City Utilities' electric system in a safe and reliable manner in accordance with NERC Reliability Standards. This authority includes directing City Utilities' personnel to take actions to protect the integrity of the bulk electric system.
3. Learns and follows City Utilities' Standards of Conduct concerning treatment of transmission operating information.
4. Operates computerized Energy Management System (EMS) to include data input, changeover, and recovery during malfunctions. Many specific tasks are accomplished through the EMS system. Monitors and reports any changes or inconsistencies in maps and/or operating information.
5. Observes load and voltage to ensure adequate supply and distribution of electricity to meet power demands. Contacts power stations for increase or decrease in watts and vars.
6. Follows a schedule of power transfer with interconnected balancing authority areas to ensure compliance with NERC Reliability Standards during normal and emergency operations.
7. Ensures generators are loaded in accordance with real-time operational constraints.
8. Keeps constantly informed via telemetry of conditions throughout the system. Records on daily log sheet or Energy Management System the hourly system readings. Ensures hourly electronic transmittal to The Energy Authority, City Utilities' marketing affiliate, of information regarding the availability of City Utilities' generation resources. Prepares monthly operational reports. Keeps other necessary records.
9. Coordinates connection/disconnection of generating units with applicable power station personnel and with the Southwest Power Pool (SPP) Balancing Authority and Reliability Coordinator. Communicates with field personnel and maintains action logs for hold and clearance logs.
10. Performs minor equipment maintenance.
11. Controls and monitors all high voltage switching to include the removal from service and restoration to service of lines and equipment requiring repair or maintenance. Reports and coordinates all generation outages and all transmission outages for facilities rated 100kV and above with the SPP Reliability Coordinator.
12. Takes trouble calls and coordinates corrective action with field personnel during off-hours for the electric system.
13. Takes all prudent action to restore service in a timely manner following outages and to minimize the effect of emergencies. Ensures, on a real-time basis, that the system is operated safely. Ensures all switching procedures are implemented per plan to ensure safety of the public and City Utilities' crews and maintain system integrity.
14. Initiates appropriate emergency procedures, when directed or when necessary, based upon own judgment. Initiates Back Up Control Center operation when conditions warrant. Notifies appropriate duty personnel when additional assistance is needed.

15. Performs other related duties as required or assigned by management.

Energy Management System Coordinator

PURPOSE OF POSITION:

Under the direction of the Director-Power System Control or designee, manages the overall functionality of the Energy Management System to meet the needs of the Power System Operators. The Energy Management System (EMS) is critical to the 24X7 operation of the electric system. The primary objective of this position is to ensure the reliable operation of this system on a continuous basis to ensure safe, reliable, and economic operation of the electric system.

ESSENTIAL JOB FUNCTIONS:

1. Is responsible for maintaining EMS applications, including SCADA, economic dispatch, automatic generation control, contingency analysis, and load forecast. These tasks will be performed in coordination with the EMS Specialist and with input from external agencies (SPP, TEA, AECl, etc.) as needed.
2. Coordinates changes to the real-time database with the EMS Specialist and T&D personnel to assure that the points are correctly assigned and data is accurate.
3. Develops and maintains power system reports on the EMS.
4. Is responsible for monitoring backups of the EMS software and database on a periodic basis to enable disaster recovery.
5. Ensures EMS policies, procedures, and documentation are compliant with Southwest Power Pool (SPP) Criteria and North American Electrical Reliability Corporation (NERC) Reliability Standards.
6. Responsible for communicating with EMS software vendor(s) to resolve outstanding "System Incidents," and coordinates updates to the system hardware and software to optimize system performance.
7. Coordinates with Information Technology and EMS software vendor(s) to schedule maintenance of system hardware or operating system, local area networks, connections to external networks, and system security.
8. Coordinates the preparation and administration of the EMS budget with the IT Business Consultant.
9. Learns and follows City Utilities' Standards of Conduct concerning treatment of transmission operating information.
10. Works with Information Technology and Risk Management department to assure compliance with applicable Critical Infrastructure Protection (CIP) regulations.
11. Performs other related duties as required or assigned by management.

Energy Management System Specialist

PURPOSE OF POSITION:

Under the direction of the Director-Power System Control and in conjunction with the EMS Coordinator, the EMS Specialist will assist in the daily monitoring and maintenance of the Energy Management System, maintain and troubleshoot EMS applications to assure their functionality, coordinate with Substations personnel to install and test new devices in the field, and work with software vendor(s) to enhance and maintain the operability of CU's Energy Management System network.

ESSENTIAL JOB FUNCTIONS:

1. Shares responsibility for maintaining EMS applications such as load forecast, automatic generation control, contingency analysis, and interchange transaction scheduling.
2. Assists in maintaining the real-time database, and coordinates with T&D personnel to assure that the points are correctly assigned and data is accurate.
3. Assists in developing and maintaining power system reports on the EMS.

4. Assists vendor and CU Information Technology (IT) personnel in hardware and software upgrades to the EMS applications as needed.
5. Coordinates and assists IT personnel with security monitoring and patch installation on the EMS.
6. Responsible for performing backups of the EMS software and database on a periodic basis.
7. Assists in the development and implementation of supplemental applications to support changing market requirements.
8. Serves as a backup for the Energy Management System Coordinator in communicating with EMS vendor and internal support personnel.
9. Learns and follows City Utilities' Standards of Conduct concerning treatment of transmission operating information.
10. Performs other related duties as required or assigned by management.

Power System Trainer/Operator

PURPOSE OF POSITION:

Under the direction of Manager-Power Systems Operations or designee, develops and administers the training requirements for Power System Control according to NERC reliability standards, SPP Criteria, and the City Utilities Training Plan for Power System Control. This position will be responsible for designing, delivering, and documenting all Federally-required training for all Power System Operators and trainees. Training will consist of a mix of course material designed, developed, and delivered "in house" as well as from outside sources.

In addition, this position will be required to perform all duties of the Power System Operator/Dispatcher position including maintaining certification and readiness to perform those duties.

ESSENTIAL JOB FUNCTIONS:

1. Follows the NERC Standards Development process to provide feedback to management concerning training and personnel related standards.
2. Participates in the SPP Operations Training Working Group and other forums to stay current with industry trends and changes affecting System Operator Training.
3. Learns and follows City Utilities Standards of Conduct concerning treatment of transmission operating information.
4. Tracks training requirements and progress for each certified System Operator in Power System Control to ensure that all regulatory and safety requirements are met and certifications are maintained.
5. Maintains their own NERC System Operator Certification through self-study and participation in mandatory training courses.
6. Uses Microsoft PowerPoint to design and develop written course materials.
7. Uses the Flex Train system and convert PowerPoint presentations into on-line learning material.
8. Performs all duties of the Power System Operator/Dispatcher vacancies during emergencies or during operator training. Power System Operator--Dispatcher duties will include:
 - a. Taking responsibility and authority to operate City Utilities' electric system in a safe and reliable manner, in accordance with NERC reliability standards. This authority includes directing City Utilities' personnel to take actions to protect the integrity of the bulk electric system.
 - b. Operating computerized Energy Management System (EMS) to include data input, changeover, and recovery during malfunctions. Many specific tasks are accomplished through the EMS system. Monitoring and reporting any changes or inconsistencies in maps and/or operating information.
 - c. Observing load and voltage to ensure adequate supply and distribution of electricity to meet power demands. Contacting power stations for increase or decrease in watts and vars.
 - d. Following a schedule of power transfer with interconnected balancing authority areas to ensure compliance with NERC reliability standards during normal and emergency operations.

- e. Ensuring generators are loaded in accordance with economic dispatching principles to produce power at minimum cost, consistent with operational constraints.
 - f. Keeping constantly informed via telemetry of conditions throughout the system. Records on daily log sheet or Energy Management System the hourly system readings. Ensures hourly electronic transmittal to The Energy Authority, City Utilities’ marketing affiliate, of information regarding the availability and costs of City Utilities’ generation resources. Preparing monthly operational reports. Keeping other necessary records.
 - g. Coordinating connection/disconnection of generating units with applicable power station personnel and with the Reliability Coordinator (SPP). Communicating with field personnel and maintaining action logs for hold and clearance logs.
 - h. Controlling and monitoring all high voltage switching to include the removal from service and restoration to service of lines and equipment requiring repair or maintenance. Responsibility includes reporting all transmission outages for facilities rated 100kV and above to the Reliability Coordinator.
 - i. Taking trouble calls and coordinating corrective action with field personnel during off-hours for the electric system.
 - j. Taking all prudent action to restore service in a timely manner following outages and to minimize the effect of emergencies. Ensuring, on a real-time basis, that the system is operated safely. Ensuring all switching procedures are implemented per plan to ensure safety of the public and City Utilities’ crews and maintain system integrity.
 - k. Initiating appropriate emergency procedures, when directed or when necessary, based upon own judgment. Initiating Emergency Control Center operation when conditions warrant. Notifying appropriate duty personnel when additional assistance is needed.
9. Performs other related duties as required or assigned by management.

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0	6-4-12	Document Origination	New
1	6-18-13	Updated Job Descriptions -JK	Update
2	3-17-14	Updated Job Descriptions -JK	Update
3	5-29-15	Updated Job Descriptions - JK	Update
4	12-13-16	Removed Pwr. Sys. Trainer Job Description - JK	Update
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