MIDAMERICAN ENERGY COMPANY

Updated: December 12, 2022

JOB DESCRIPTIONS

Job Title	Reports To	Job Description
ELECTRIC SYSTEM PLANNING		
Manager, Electric System Planning	VP, Transmission Planning and Development	The Manager, Electric System Planning manages the electric system planning staff. The manager is responsible for the planning of all electric transmission, substation, high voltage distribution and major electric distribution facilities throughout the MidAmerican system. Furthermore, the manager develops strategy and business plans for efficient, safe, reliable, regulatory-compliant utilization of the transmission system that promotes revenue enhancement; manages the business use of the company's high-voltage distribution and transmission assets, including existing and new interconnections; directs and participates in development of and revisions to MidAmerican's attachment O, MM and GG rate templates of Midcontinent Independent System Operator's (MISO) Open Access Transmission Tariff (OATT), interconnection agreements, operating agreements, joint-ownership agreements, facility agreements and associated regulatory filings; directs the handling of requests and the processing of transmission-related agreements and the development of transmission-related rates and charges; represents the company's interest in regional transmission-related forums. Additional responsibilities include participation in regional transmission planning, ensuring that employees remain actively involved with neighboring utilities and other industry and professional organizations and leading the development of a transmission planning process to meet Federal Energy Regulatory Commission (FERC) regulations and North American Electric Reliability Corporation (NERC) standards and the implementation of such a process. The manager also recommends and implements policies affecting the MidAmerican Energy Company (MEC) delivery system.

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Principal Engineer – Electric System Planning	Manager, Electric System Planning	The Principal Engineer – Electric System Planning provides highly skilled engineering services in the following areas: planning electric transmission and distribution systems; conducting power flow, power stability, reliability, and economic evaluation studies, separately and in conjunction with other utilities; conduct harmonics and other power quality studies; preparing and negotiating contracts; coordinating electric system planning approaches with power system protection design, engineering design, and operational approaches; system disturbance analysis; investigating and solving highly technical, complex and unique engineering problems requiring creative and imaginative thinking.
Senior Engineer II – Electric System Planning	Manager, Electric System Planning	Work responsibilities for the Senior Engineer II – Electric System Planning include transmission power flow analysis, development of alternatives to solve transmission and distribution issues and serve customers, review of studies by the regional transmission organizations (MISO and SPP). A Senior Engineer II prepares distribution information in support of system impact study agreements, distribution system impact studies and develops available transmission capability components; develops analyses of the MEC electric system, including power flow studies and long range plans; recommends electric system projects and expenditures and assists in coordinating the electric delivery capital budget; participates in inter-utility and regional transmission planning and the development of interconnection agreements; provides planning support for electric system construction and operation, including technical support for voltage and power quality analyses; and the development of transmission plans to meet FERC regulations and NERC standards. A Senior Engineer II leads the preparation of stability analyses, PROMOD analyses, and other system assessments, as required. A Senior Engineer also prepares reliability analyses of electric systems including generation, transmission, and distribution facilities; analyzes and interprets facility outage data and provides estimates of typical failure and repair rates for facilities; makes recommendations on appropriate equipment spares, and reliability analysis methods; prepares reliability based standards and recommends improvements in electric system planning methods to reflect state-of-the-art reliability methods; and develops and makes recommendations on value-based planning methods.
Senior Engineer – Electric System Planning	Manager, Electric System Planning	Work responsibilities for the Senior Engineer – Electric System Planning include transmission power flow analysis, development of alternatives to solve transmission and distribution issues and serve customers, review of studies by the regional transmission organizations (MISO and SPP). A Senior Engineer prepares distribution information in support of system impact study agreements, distribution system impact studies and develops available transmission capability components; develops analyses of the MEC electric system, including power flow studies and long range plans; recommends electric system projects and expenditures and assists in coordinating the electric delivery capital budget; participates in inter-utility and regional transmission planning and the development of interconnection agreements; provides planning support for electric system construction and operation, including technical support for voltage and power quality analyses; and the development of

		transmission plans to meet FERC regulations and NERC standards. A Senior Engineer leads the preparation of stability analyses, PROMOD analyses, and other system assessments, as required. A Senior Engineer also prepares reliability analyses of electric systems including generation, transmission, and distribution facilities; analyzes and interprets facility outage data and provides estimates of typical failure and repair rates for facilities; makes recommendations on appropriate equipment spares, and reliability analysis methods; prepares reliability based standards and recommends improvements in electric system planning methods to reflect state-of-the-art reliability methods; and develops and makes recommendations on value-based planning methods.
Engineer II – Electric System Planning	Manager, Electric System Planning	Work responsibilities for the Engineer II – Electric System Planning include transmission power flow analysis, development of alternatives to solve transmission and distribution issues and serve customers, review of studies by the regional transmission organizations (MISO and SPP). An Engineer II also prepares distribution system impact study information in support of system impact study agreements, distribution system impact studies and develops available transmission capability components; develops long range plans; recommends electric system projects and expenditures, and assists in coordinating the electric delivery capital budget; participates in inter-utility and regional transmission planning and the development of interconnection agreements, provides planning support for electric system construction and operation, including technical support for voltage and power quality analyses and develops area transmission plans as part of the transmission planning process to meet FERC regulations and NERC standards. An Engineer II prepares stability analyses, PROMOD analyses, and other system assessments as required. An Engineer II also prepares reliability analyses of electric systems including generation, transmission and distribution facilities; analyzes and interprets facility outage data and provides estimates of typical failure and repair rates for facilities; makes recommendations on appropriate equipment spares; prepares reliability-based standards and recommends improvements in electric system planning methods to reflect state-of-the-art reliability methods.
Engineer I – Electric System Planning	Manager, Electric System Planning	The Engineer I – Electric System Planning performs specific engineering tasks and assignments in support of electric system planning. Responsibilities include transmission power flow analysis, development of alternatives to solve transmission and distribution issues and serve customers, assisting in the review of studies prepared by the regional transmission organizations (MISO and SPP), providing planning support for electric system construction and operation, assisting with reliability analyses, making recommendations on appropriate facilities and supporting the transmission planning process to meet FERC regulations and NERC standards. Assists with the preparation of stability analyses, PROMOD analyses and other system assessments as required.

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Senior Engineering Specialist – Electric System Planning	Manager, Electric System Planning	The work responsibilities for the Senior Engineering Specialist – Electric System Planning include providing support for NERC and FERC compliance, analyzing performance of the electric distribution system using power flow models, preparing evaluations of potential system enhancements, preparing written recommendations, reviewing customer distributed generation installations and processing interconnection requests, calculating feeder cable ampacity ratings and producing the annual load book, which is a listing of recorded loadings on circuits and substations on or about the summer peak load. The Senior Engineering Specialist also supports the following computer applications: historical database of energy management system information, power flow modeling software of the electric distribution system, underground cable rating modeling of distribution cables and the distribution feeder capacitor system. These applications are either directly used or their output is used by Electric System Planning.
Engineering Specialist II – Electric System Planning	Manager, Electric System Planning	The work responsibilities for the Engineering Specialist II – Electric System Planning include providing support for NERC and FERC compliance, analyzing performance of the electric distribution system using power flow models, preparing evaluations of potential system enhancements, preparing written recommendations, reviewing customer distributed generation installations and processing interconnection requests, calculating feeder cable ampacity ratings and producing the annual load book, which is a listing of recorded loadings on circuits and substations on or about the summer peak load. The Engineering Specialist II also provides support for the following computer applications: historical database of energy management system information, power flow modeling software of the electric distribution system, underground cable rating modeling of distribution cables, and the distribution feeder capacitor system. These applications are either directly used or their output is used by Electric System Planning.
Engineering Specialist I – Electric System Planning	Manager, Electric System Planning	The work responsibilities for the Engineering Specialist I – Electric System Planning include providing support for NERC and FERC compliance, analyzing performance of the electric distribution system using power flow models, preparing evaluations of potential system enhancements, preparing written recommendations, reviewing customer distributed generation installations and processing interconnection requests, calculating feeder cable ampacity ratings and producing the annual load book, which is a listing of recorded loadings on circuits and substations on or about the summer peak load. The Engineering Specialist I also provides support for the following computer applications: power flow modeling software of the electric distribution system, underground cable rating modeling of distribution cables and the distribution feeder capacitor system. These applications are either directly used or their output is used by Electric System Planning.

Business Support Analyst II	Manager, Electric System Planning	The Business Support Analyst II provides a wide range of financial analysis and support to the business. Conducts complex research and support in areas of cost control, business performance evaluation and evaluation of capital investment decisions. Participates in development of and revisions to transmission tariffs, interconnection agreements, operating agreements, joint ownership agreements, facility agreements and Federal Energy Regulatory Commission (FERC) filings. The Business Support Analyst II partners with business leadership to provide solutions to complex business needs ranging from strategic initiative evaluation and process changes to transmission service pricing and support of FERC filings. Participates in updating MidAmerican's portion of the MISO Open Access Same Time Information System (OASIS) and monitors OASIS compliance. Responsibilities include applying prescribed methods and standard practices consistent with regulatory compliance when performing specific tasks within projects and assisting department staff on more complex projects.
SYSTEM CONTROL AND GRID TECHNOLOGY		
General Manager, System Control and Grid Technology	VP, Electric Delivery	The General Manager, System Control and Grid Technology, leads the operation of the electric control center, which is responsible for the real-time, daily operation of MidAmerican Energy Company's (MEC) transmission and distribution systems. Employees monitor both internal system conditions as well as external system conditions at the interconnection points of MEC's local balancing area and make adjustments to system components to ensure system reliability and security. The General Manager, System Control and Grid Technology is responsible for ensuring that all control center functions, and the transmission system operate in compliance with North American Electric Reliability Corporation (NERC) reliability and cybersecurity standards. Position responsibilities include the preparing for periodic regulatory audits, ensuring reporting requirements are met, implementing audit recommendations, ensuring compliance with the Federal Energy Regulatory Commission (FERC) Standards of Conduct (SOC), leading transmission and distribution grid technology projects to improve reliability and resilience, acting as MEC contact for the Midwest Reliability Organization (MRO), Midcontinent Independent Transmission System Operator (MISO), and other duties as assigned.

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Engineer I – Control Center	General Manager, System Control and Grid Technology	The Engineer I – Control Center provides engineering services for MEC's electric system operations. Responsibilities include transmission outage scheduling studies project management, real time network applications use and providing engineering support for the energy management system.
Engineer II – Control Center	General Manager, System Control and Grid Technology	The Engineer II – Control Center provides engineering services for MEC's electric system operations. Responsibilities include transmission outage scheduling studies project management, real time network applications use and providing engineering support for the energy management system.
Senior Engineer – Control Center	General Manager, System Control and Grid Technology	The Senior Engineer – Control Center provides engineering services for MEC's electric system operations. The senior engineer provides highly technical engineering services and directs the work of others to support the reliable and efficient operations of the electric system while maintaining compliance with applicable NERC reliability standards. Responsibilities include overseeing and guiding operations and engineering staff in problem resolution of complex engineering problems.
Principal Engineer – System Operations	General Manager, System Control and Grid Technology	The Principal Engineer – System Operations provides engineering services for MEC's electric system operations. The Principal Engineer provides highly technical engineering services and directs the work of others for the planning, design and construction of project additions to MEC's energy management system. Responsibilities include project management and guiding the engineering staff for all phases of project additions; overseeing and guiding engineering staff in project management and design and problem resolution of complex engineering problems.
Manager, Transmission Operations	General Manager, System Control and Grid Technology	The Manager, Transmission Operations manages the operation of MEC's 34.5 kV to 345 kV systems, as well as the Local Balancing Authority (LBA) for MidAmerican and neighboring utilities within the defined area. This responsibility includes the real-time functions required for the safe, reliable and efficient operation of the MEC transmission system. These functions include managing the transmission operators responsible for monitoring and adjusting transmission system components to ensure reliability as well as the directing of field crews involved in construction/maintenance activities and outage response on the transmission system. The Manager, Transmission Operations ensures that all LBA and Transmission Operations functions are performed in compliance with NERC reliability and cyber security standards. In addition, the Manager, Transmission Operations ensures compliance with FERC SOC for transmission operations. The Manager, Transmission

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		Operations serves as the primary operational point of contact between MEC and adjacent LBAs, Transmission Operators, MISO, and the Midwest Reliability Organization (MRO).
Senior Transmission Operator	Manager, Transmission Operations	The Senior Transmission Operator takes a leadership role in operating the MEC transmission system. These responsibilities include coordination with MISO Operations management, for the operation of the Bulk Electric System (BES) within system operating limits. Monitors and exercises independent judgment in the operation of the bulk electric power system based on guidelines provided by NERC Operating Policies, Regional Council Policies and Operating Procedures, and FERC SOC for normal, emergency and restoration conditions, as well as local operating practices and procedures.
Transmission Operator	Manager, Transmission Operations	The Transmission Operator monitors and exercises independent judgment in the operation of the bulk electric power system (345 kV and 161 kV systems) based on guidelines provided by NERC regional transmission operating policies, Regional Reliability Organization policies and operating procedures and FERC SOC for normal, emergency and restoration conditions. This position ensures the safe, reliable and economic operation of the bulk power transmission system by taking appropriate steps to maintain and monitor system operating limits.
Associate Transmission Operator	Manager, Transmission Operations	Under the direction of a Transmission Operator, the Associate Transmission Operator monitors and operates the bulk electric power system (345 kV and 161 kV systems), based on standards provided by NERC regional transmission operator operating procedures and FERC SOC for normal, emergency and restoration conditions. The Associate Transmission Operator provides support to the transmission operator in the area of preparing and instructing switching, alarm response, dispatching, and other areas as directed. This position is intended to be a training position until the employee is fully qualified to operate the system independently as a Transmission Operator.
Transmission Outage Coordinator	Manager, Transmission Operations	The Transmission Outage Coordinator acts as the coordinator for all scheduled outages associated with the transmission operations area of responsibility. (This includes all 345, 161, 69, and 34.5 kV lines and related substation equipment. The Transmission Outage Coordinator receives requests for transmission outages, writes, analyzes and approves all scheduled switching on the portions of the bulk power electrical transmission system noted above. Ensures that all parties associated with the scheduled outage are informed of the type, extent and duration of the outage. This includes contacts with foreign utilities, MISO and MEC distribution operations.