

# Electrical Engineer I, II or III (Replaces 12/02/2021 Posting)

Open Date: 4/7/2022 Close Date: 4/21/2022



**Department/Location:** Transmission, Engineering, and Construction; Bismarck, ND

**Company:** Basin Electric Power Cooperative

## **Position Purpose:**

**Electrical Engineer I** - This is an entry level position responsible for assisting in the development of short and long range bulk transmission system expansion plans, conducting operating studies for major system additions, evaluating transmission service and generation interconnection requests, representing Basin Electric Power Cooperative (BEPC) on joint studies, providing technical review of other utilities' studies, and submitting system modeling data to Southwest Power Pool (SPP), Western Electricity Coordinating Council (WECC), Midwest Independent System Operator (MISO) and other organizations. The position will also assist in the development and maintenance of software associated with power system analysis tools.

**Electrical Engineer II** - This position is responsible for performing short and long range bulk transmission system expansion plans, conducting operating studies for major system additions, evaluating transmission service and generation interconnection requests, representing Basin Electric Power Cooperative on joint studies, providing technical review of other utilities' studies, and submitting system modeling data to Southwest Power Pool (SPP), Western Electricity Coordinating Council (WECC), Midwest Independent System Operator (MISO), and other organizations.

**Electrical Engineer III** - This position is responsible for performing short and long range bulk transmission system expansion plans, conducting operating studies for major system additions, evaluating transmission service and generation interconnection requests, representing Basin Electric Power Cooperative on joint studies, providing technical review of other utilities' studies, and submitting system modeling data to Southwest Power Pool (SPP), Western Electricity Coordinating Council (WECC), Midwest Independent System Operator (MISO), and other organizations. This position assists with network load serving studies and other studies as required to meet North American Electric Reliability Corporation (NERC) Transmission Planning (TPL) standard requirements.

**The position will also assist in the development and maintenance of software associated with power system analysis tools. This position is identified as a Critical Infrastructure Protection (CIP) related position, which may allow physical and/or logical access to Bulk Electric System (BES) cyber related assets or systems.**

## **Qualifications:**

**Electrical Engineer I** - To perform effectively in this position, the incumbent must have knowledge of electrical engineering and transmission system studies at a level acquired through the completion of a four-year degree from an Engineering Accreditation Commission/Accreditation Board for Engineering and Technology (EAC/ABET) accredited electrical engineering program. The ability to demonstrate good written and verbal communication skills is required. Proficiency with personal computers, Microsoft Word, Outlook, and Excel; and computer modeling of power system components is required.

# Electrical Engineer I, II or III (Replaces 12/02/2021 Posting) (Continued)

**Electrical Engineer II** - To perform effectively in this position the incumbent must have knowledge of electrical engineering and transmission system studies at a level acquired through completion of a four-year degree from an Engineering Accreditation Commission/Accreditation Board for Engineering and Technology (EAC/ABET) accredited Electrical Engineering program and three years of related electrical engineering experience. An engineer-in-training (EIT) or Fundamentals of Engineering (FE) certificate is required. The ability to demonstrate good written and verbal communication skills is required. Proficiency with personal computers, Microsoft Word, Outlook, and Excel; and computer modeling of power system components is required.

**Electrical Engineer III** - To perform effectively in this position the incumbent must have knowledge of electrical engineering and transmission system studies at a level acquired through completion of a four-year degree from an Engineering Accreditation Commission/Accreditation Board for Engineering and Technology (EAC/ABET) accredited Electrical Engineering program and six years of related electrical engineering experience. An engineer-in-training (EIT) or Fundamentals of Engineering (FE) certificate is required. The ability to demonstrate good written and verbal communication skills is required. The incumbent must be able to use various power system analysis analytical tools and methods. Proficiency with personal computers, Microsoft Word, Outlook, and Excel; and computer modeling of power system components is required.

## **Typical Physical/Mental/Environmental Demands:**

This position requires frequent sitting; and occasional standing/walking, bending/reaching, climbing, kneeling, crawling, use of keyboard/computer, pushing/pulling up to 20 pounds, and lifting/carrying up to 50 pounds. This position also requires finger dexterity, hand coordination, good hearing, and color vision. It also requires the ability to analyze data/reports and conduct research; implement recommendations; develop plans, procedures, and goals; and present information to others. The incumbent may be required to work under pressure due to conflicting priorities and deadlines. This position occasionally works in conditions of dirt/dust, fumes, chemicals, extreme heat/cold, vibration, noise, poor ventilation, electrical risks, and confined areas. The incumbent must be respirator qualified and able to operate a motor vehicle. The incumbent is required to be clean-shaven for respirator fit testing while assigned to work on a plant site. The incumbent may have to work at heights up to 600 feet, which requires the use of safety equipment, including a harness, in accordance with ANSI Z359 standards, and may access all areas of the plant site. Travel is required, either by motor vehicle or traveling in the Cooperative or commercial plane. Equipment operated includes computers, telecommunication devices, electrical test equipment, and other test equipment, as needed.

Applicants interested in this opening should go to <https://www.basinelectric.com> to apply.

Employees must apply through Inside Basin, by clicking on a position and signing into the Infor Application.

If you have any questions, please contact JAIME FUCHS at 701-557-5608.

Basin Electric is an Equal Employment Opportunity Employer regarding race, color, religion, sex, sexual orientation, gender identity, national origin, disability, and veterans status.