



**Muscatine  
Power and Water**

Date Posted: January 27, 2012

### **Power System Planning Engineer**

Muscatine Power and Water has an immediate opening for an experienced Power System Planning Engineer. Responsible for analysis and planning for the impact of future system developments upon the Utility's transmission and distribution system, as well as provide engineering support for ongoing T&D, water, technical services, generation, and telecommunications projects.

#### **Responsibilities**

- Conduct, coordinate, interpret, and prepare transmission and distribution system studies, computer models, load flow analyses, and short circuit studies
- Develop and maintain both short and long range plans of required system improvements
- Forecast future system demand and energy requirements
- Monitor substation, transformer, and other equipment loading, as well as track failure, maintenance, and outage issues
- Apply engineering economics to the evaluation and selection of planning alternatives in accordance with good engineering practices
- Maintain coordination of substation relays and line fuses
- Supply data to and review results of customer harmonic studies
- Revise transformer specs and loss evaluation formulas as required
- Review Dranetz, digital fault recordings, event records, and relay data as required
- Provide technical assistance and engineering support for on-going transmission & distribution, water, technical services, generation, and telecommunications projects as required
- Coordinate with system control data submittals for MAPP, ITWG, and other data requests
- Assist in ensuring that MPW meets NERC Planning standards and prepare documentation as required

#### **Competencies & Experience**

- Three+ years of electric utility planning experience
- Knowledge of computer programs relating to electric systems studies and PC applications, including word processing, spreadsheets, and databases
- Familiarity with NESC, NEC, and OSHA requirements (local and State codes)
- Must work well both independently and as a team member as situations require and be able to communicate effectively to a diverse group of internal and external customers
- Must be a self-starter that is willing to make decisions and pursue answer on a variety of project and operations related issues in a timely and cost effective manner
- Must have strong organizational skills with the ability to independently follow through on instructions and work with minimal supervision
- Must be willing to work with internal and external customers to provide strong customer liaison
- Ability to develop, interpret and understand technical manuals, plans, sketches, and schematic diagrams

#### **Education**

BSEE degree, power option preferred