



Muscatine Power and Water

Position: Civil Engineer I or II

Reports to: Chief Operations Engineer

Last Revised: April 2020

Department: Operations Engineering

Pay Grade: 35 or 37

FLSA Status: Exempt

Job Purpose

Provide civil engineering support for on-going electrical and water transmission and distribution, technical services, generation, and telecommunication projects. Work with internal and external customers to provide engineering guidance and administer contract responsibilities as needed. Work with other departments to schedule work as needed.

This position has a level I and a level II grading based on experience and demonstrated abilities. Tasks are performed at each level based on the individual's knowledge and experience.

Specific Responsibilities

1. Monitor and coordinate current construction and maintenance projects. Including:
 - a. Work with contractors and consultants.
 - b. Periodically review and update construction standards and practices.
 - c. Apply engineering principles to the evaluation and selection of alternatives.
 - d. Assist in the design and layout of electrical transmission and distribution lines, including substation structures.
 - e. Assist in the coordination, interpretation, and preparation of electrical and water transmission and distribution, technical services, generation, and telecommunication system studies and computer models.
 - f. Design and document civil and structural components of projects, including site surveys and inspections, drainage systems, foundations, structures, and roadways.
2. Coordinate engineering activities with industrial and commercial customers. Activities include MP&W policy, technical details, and general assistance with service installations.:

Other Responsibilities

1. Assist Chief Operations Engineer with technical problems related to the operation and maintenance of electrical and water transmission and distribution, technical services, generation, and telecommunications systems.
2. Assist with overall system reliability improvement efforts, including the development, population, and use of databases used to track failure, maintenance, and outage issues.
3. Assist in the development of the annual operating budget and appropriate projections for the department.
4. Other duties as assigned.

Qualifications

Knowledge

1. Bachelor's degree in civil engineering preferred.
2. Civil Engineer I is an entry-level engineering position. Civil Engineer II is a minimum 2 years utility experience preferred.
3. Registered Professional Engineer in the State of Iowa beneficial for level II position, or working toward certification. If obtained, certification must be maintained while employed in the position.
4. Knowledge of applicable local, state, and federal codes and standards that govern work on electric and water transmission and distribution systems.
5. Familiarity with CAD and GIS preferred.

Skills

1. Excellent verbal and written communication skills.
2. Excellent interpersonal and listening skills, with ability to build productive professional relationships and promote a team atmosphere.
3. Project management skills.
4. Good judgment and reasoning skills.
5. Problem identification, analysis, and solving.
6. Proficiency with use of Microsoft Office Word at an intermediate level and Excel at an advanced level.

Abilities

1. Ability to work as part of a team, either as team leader or a member of a team.
2. Ability to drive results and ensure work is accomplished properly, safely, and in a timely manner.
3. Ability to work independently, effectively prioritize work, manage multiple tasks, meet deadlines, and adjust work priorities as needed to meet department/organizational objectives.
4. Ability to develop, read, and interpret drawings, schematics, specifications, and technical manuals.
5. Ability to distinguish colors.

Other Position Requirements

1. Must be able to attend work on a regular basis and work extended hours as needed.
2. Must maintain a method of communication in order to be contacted by MP&W outside normal work hours.

Work Environment

1. Work environment is primarily in an office environment. Occasional visits to an industrial coal-fired power plant or outside job sites may be required. Fieldwork is completed in all weather conditions.
2. Must comply with all safety and site rules at all locations.

WorkSTEPS

Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions.

This position is rated **Light** in the WorkSTEPS program.

Key (Based on a typical week):

N=Never

O=Occasional (1%-33% of the time, or 1-100 times per day)

F=Frequent (34%-66% of the time, or 100-500 times per day)

C=Constant (over 66% of the time, or over 500 times per day)

Activity					Activity	Weight
	N	O	F	C		
Lifting/Carrying					Pushing Max	N/A
Up to 25 pounds		X			Pulling Max	N/A
25-50 pounds						
51-100 pounds						