

ELECTRICAL ENGINEER III

Recruitment #1508-1828-001

List Type Original

Requesting Department DPW-WATER-ENGINEERING

Open Date 9/9/2015 11:00:00 AM

Filing Deadline 10/2/2015 11:59:00 PM

HR Analyst Marti Cargile

PURPOSE

Under the direction of the Manager of Water Engineering, the Electrical Engineer III designs and prepares engineering and construction documents and coordinates construction activities related to electrical systems for the Capital Improvements Program of the Milwaukee Water Works (MWW).

ESSENTIAL FUNCTIONS

- Performs electrical engineering studies and project research.
- Prepares preliminary and final electrical engineering design and construction documents for new construction and modifications to existing Milwaukee Water Works' (MWW) facilities.
- Performs activities associated with project bids and awards, which entails preparing estimates, preparing and checking contract documents (plans, specifications, calculations, and designs), and developing requests for proposal.
- Oversees construction management efforts, including reviewing shop drawings, paying requisitions, making contract modifications, assisting in project cost control, coordinating the activities of consultants and contractors, and inspecting and closing out construction projects.
- Provides technical assistance to water plant operating, maintenance, distribution, and business staff as needed.
- Makes recommendations relative to changes in specifications, existing methods, and procedures related to the electrical engineering discipline.

Reasonable accommodations requested by qualified individuals with disabilities will be made in accordance with the Americans with Disabilities Act (ADA) of 1990, as amended by the Americans with Disabilities Act Amendments Act (ADAAA) of 2008.

MINIMUM REQUIREMENTS

1. Bachelor of Science degree in electrical engineering from an ABET-accredited college.
2. Two years of professional engineering experience in electrical design and/or construction activities.
 - **IMPORTANT NOTE:** *To receive credit for college, transcripts are required and must be received by the application period closing date. College transcripts should be attached to your online application. Applications without transcripts attached will be considered incomplete and will be rejected. Your transcript must be legible and include your college/university name, your name, the degree completed (if applicable) and the date completed.*
 - *Equivalent combinations of education and experience may also be considered. For example, a Master's Degree in electrical engineering may be substituted for one year of the required engineering experience.*
3. Valid State of Wisconsin driver's license at time of appointment and throughout employment.

DESIRABLE QUALIFICATIONS

- Registration or eligibility for registration as a Professional Engineer (PE) in the State of Wisconsin within two years of appointment.

KNOWLEDGES, SKILLS, ABILITIES AND OTHER CHARACTERISTICS

- Knowledge of the practical application of engineering science and technology.
- Knowledge of construction practices and materials.
- Knowledge of mathematics and the ability to make accurate calculations.
- Ability to read and interpret complex technical documents, designs, and plans.
- Proficiency using standard computer applications, such as word processing, spreadsheet, database, and presentation.
- Ability to use engineering- and design-related computer applications.
- Skill in designing medium voltage power distribution systems. Familiarity with design codes and standards, such as National Electrical Code (NEC), National Electrical Safety Code (NESC), National Electrical Manufacturers Association (NEMA), Institute of Electrical and Electronics Engineers (IEEE) and American National Standards Institute (ANSI).
- Knowledge of National Fire Protection Association (NFPA) 70E compliance requirements.
- Knowledge of safety protocols for working around medium voltage electrical switchgear in the field.
- Familiarity with protective relay equipment from various vendors typically used in medium voltage switchgear protection, including SEL (Schweitzer Engineering Laboratories, Inc.), ABB, GE (General Electric) and Basler Electric.
- Knowledge of remote terminal unit (RTU) and data concentrator based supervisory control and data acquisition (SCADA) systems, telemetering, and communications.
- Critical thinking skills, including analytical, problem-solving, and decision-making skills as well as sound judgment.
- Effective written communication skills.
- Effective oral communications skills, including the ability to explain technical concepts to lay audiences.
- Interpersonal and customer service skills: ability to work effectively, courteously, and professionally with people across all staff levels, including City managers, other engineers, technicians, clerical staff, contractors, and consultants.
- Project management skills and the ability to direct and coordinate the activities of staff and contractors.
- Ability to inspect construction projects in progress.
- Ability to prioritize and accomplish work within tight deadlines.
- Administrative skills, ability to maintain accurate records, and attention to detail.
- Physical ability to climb, kneel, and bend as well as lift and move materials weighing up to 10 lbs.

CURRENT SALARY

The current starting salary (**PG 2IN**) for City of Milwaukee residents is **\$66,324** annually, and the non-resident starting salary is \$64,697.

SELECTION PROCESS

The selection process will be job related and will consist of one or more of the following: education and experience evaluation; written, oral, or performance tests, or other assessment methods. The Department of Employee Relations reserves the right to call only the most qualified candidates to oral and performance examinations. Oral examinations may include written exercises. Selection process component weights will be determined by further analysis of the job.

Initial Filing Date: The examination will be held as soon as practical after **October 2, 2015**. Receipt of applications may be discontinued at any time after this date without prior notice. However, recruitment

may continue until the needs of the City have been met. Qualified applicants will be notified of the date, time, and place of the examination. Unless otherwise required by law, the City of Milwaukee will not provide alternative test administration. The applicant is responsible for attending all phases of the job selection process at the time and place designated by the City of Milwaukee.

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- ***NOTE:*** *The City's residency requirement set forth in City Charter 5-02 is under litigation. Even though the City is legally able to enforce the current residency requirements based on a recent Wisconsin Court of Appeals decision, the City has agreed to continue to suspend enforcement of the ordinance during the time it may take to know whether the Wisconsin Supreme Court will review the case. Once the Supreme Court refuses review or affirms the Court of Appeals decision, the City intends to fully enforce the ordinance. Consequently, employees who disregard the requirements of the ordinance do so at their own risk. Applicants for City of Milwaukee positions should understand the City's commitment to its residency requirement. During this period of uncertainty it is important to take that into account when submitting an application and more importantly when deciding to accept an employment offer. Please contact (414) 286-3751 if you have questions regarding your individual circumstances as part of the application and/or selection process.*