



Mechanical Engineer

GENERAL OVERVIEW OF POSITION:

The Mechanical Engineer will perform professional engineering work in connection with the design, maintenance, and operation of utility and utility customer systems; does related work as required.

This is a professional engineering position that works in the design, construction, maintenance, and operation of the utility systems, including Power Generation Facilities, Water/Wastewater Treatment, Water Distribution Facilities, and Electric Distribution Facilities. The Mechanical Engineer acts as Lead Engineer on assigned projects. Work is performed under the direction of the Engineering Manager. Occasional supervision is exercised over craft employees, contractors and consultants as assigned. This is an exempt position.

EXAMPLES OF DUTIES AND RESPONSIBILITIES (Illustrative only):

- Prepare engineering reports on assigned projects. Prepare drawings, hand sketches, and specifications.
- Design system enhancements and recommend operational improvements.
- Work with consultants, contractors, and suppliers on engineering studies and equipment installations.
- Review plans and shop drawings of contractors to verify calculations and prints.
- Monitor and evaluate utility facility conditions, consider alternatives, and recommend reinforcement actions with related costs.
- Prepare detailed construction plans, specifications and compliance guidelines.
- Provide technical support for utility and utility customer operations.
- Evaluate manufacturer's data and interprets code requirements to develop construction standards using new materials and equipment.
- Maintain knowledge of current code requirements.
- Supervise those employees or contractors assigned.
- Remain available for call out.
- Available to work nights, weekends, holidays, and in emergencies as required.

(Note: The duties listed above are intended as illustrations of the various types of work performed by persons in positions covered by this classification specification. This list is not all inclusive. The omission of a particular job duty does not mean that the duty is not one of the essential functions of the position. Management reserves the right to assign employees in this classification to duties not listed above, if the duties are fairly within the scope of responsibilities applicable to the level of work performed by employees in positions covered by this classification specification.)

REQUIRED EDUCATION, TRAINING AND EXPERIENCE:

Associate Level

- Bachelor's degree in Engineering or related field with major work in Mechanical, Engineering from an accredited college or university;
- Successful completion of Engineer-In-Training Exam and possession of EIT credential
- Or any equivalent combination of experience in professional engineering work; or any equivalent combination of experience or training which provides the required knowledge, skills, and abilities.

Mid-Level

In addition to requirements of Associate Level;

- A minimum of five years' experience in a power generating facility or related field;
- Possession of a Wisconsin Professional Engineer License, or ability to acquire upon request;

Senior Level

In addition to requirements of Mid-Level;

- A minimum of ten years' experience in a power generating facility or related fields.
- Possession of a Wisconsin Professional Engineer License

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Associate Level and Mid-Level

- Thorough knowledge of the principles and practices of engineering as applied to the maintenance, development, and construction of utility projects;
- Ability to plan projects and prepare related designs, estimates and specifications;
- Ability to perform engineering computation and to make comprehensive recommendations for the solution of problems;
- Ability to plan, lay-out and direct work;
- Ability to maintain effective work relationships with others;
- Skill in the use of engineering instruments and equipment;
- Ability to express oneself clearly and concisely, orally and in writing;
- Good professional engineering judgment;
- Fundamental knowledge of Microsoft Windows and Microsoft Office software including storing and retrieving electronic files, and ability to work with a variety of electronic reporting programs.
- **Associate Level** will receive assistance with duties and responsibilities; design engineering, conducting training and coaching, preparation of reports, management presentations, customer presentations, and interpreting environmental permits and regulations to ensure compliance.
- **Associate Level** may perform on-call duties after adequate experience in plant environment.

Senior Level

In addition to requirements of Mid-Level;

- Considerable professional engineering judgment is exercised to evaluate complex technical and strategic operating issues and recommending optimum solutions.

PHYSICAL REQUIREMENTS:

- Ability to perform demanding physical tasks at times such as walking over rough or uneven surfaces, bending, stooping, working in confined spaces and lifting or carrying moderately heavy (up to 50 lb.) items;
- Ability to climb a ladder to access process equipment for inspection;
- Ability to operate complex gasoline, electric or diesel-powered machinery or shop equipment requiring manipulation of multiple controls, fine adjustments or both.

ENVIRONMENTAL REQUIREMENTS:

- Exposure to adverse environmental conditions.

SENSORY REQUIREMENTS:

- Color, sound, odor, depth, hearing and visual perception and discrimination;
- Good oral communication ability.

OTHER REQUIREMENTS:

- Possession of a valid driver's license and a good driving record;
- May be required to use personal vehicle for use on the job.

Revised and accepted on: August 21, 2019