**Position Summary:** This position performs technical functions of a professional engineering nature for the regulation of natural gas utilities and natural gas pipeline operators in the State of Wisconsin. Work is performed under close supervision of the Pipeline Safety Program Manager and the Chief Engineer, with guidance from other experienced engineers and is reviewed for results, engineering methods, and consistency with Commission policy and pertinent regulations. The primary responsibility is to monitor and enforce compliance with state and federal pipeline safety regulations to ensure the safe, reliable, and environmentally-sound operation of natural gas facilities, which currently includes over 35,000 miles of natural gas pipelines and three liquefied natural gas plants which provide natural gas service to over 2,000,000 customers. This not only ensures safe and reliable service to the natural gas consumer of this state but also the safety of the public in general.

This position is also responsible for the review and analysis of natural gas construction projects which require Commission approval in accordance with State Statute and Administrative Code. These projects range in cost from $2,500,000 through $25,000,000. The reviews include engineering and economic analyses, coordination with other Commission staff and other agencies, liaison and interaction with pipeline operators and consumers, preparation of reports and other documents, presentation of testimony, and the development of recommendations to the Commission.

Additional responsibilities include: special investigations into a variety of technical questions or problems relating to natural gas service adequacy, reliability, efficiency, economics, and safety of overall utility operations; providing technical assistance and engineering advice in other Commission proceedings; enforcement and interpretation of applicable Wisconsin Statutes and Administrative Codes, the Code of Federal Regulations and other nationally accepted codes and standards; investigating consumer complaints of a technical nature; and, maintaining and improving professional skills and knowledge.

All work functions are performed under the guidance of, and in accordance with, the Wisconsin Statutes and Administrative Code and the Code of Federal Regulations.

**% Time Goals and Worker Activities**

**70% A. Enforcement of Gas Pipeline Safety Rules**

30% A1. Conduct field inspections of natural gas utility distribution and transmission facilities and associated facilities, including construction in progress, to determine compliance with safety codes and standards established by the Commission and the Pipeline and Hazardous Materials Safety Administration of the U.S. Department of Transportation, as set forth in the Wisconsin Statutes and PSC Chapter 135, Wisconsin Administrative Code, which includes the adoption of Part 192 and 193 in Title 49, Code of Federal Regulations.

A2. Assist in the investigation of natural gas related incidents, such as explosions and interruptions of service, to ensure the safety of the public and to determine the adequacy of existing rules and procedures.

A3. Assist in the review of emergency plans and operating rules to assess the utility’s ability to respond to accidents.

20% A4. Write reports related to investigations, inspections, and review of utility procedures which include documentation of analysis of collected data, conclusions, and recommendations. As necessary, conduct further investigations of specific problems and suspected or indicated deficiencies.
A5. Compile and evaluate routine reports filed by natural gas utilities with the PSC.

A6. Inspect records maintained by natural gas utilities to assure adequate safety-related information is available.

A7. With the assistance of the Pipeline Safety Program Manager, review inspection results with utility management, and assure development of the necessary improvements and corrections required to ensure compliance with safety codes and standards.

A8. Monitor utility compliance and progress related to staff recommendations for improvements or corrections needed to ensure compliance.

15% B. Review of Applications for Construction of New Facilities

B1. Assist with the review of the applications for the construction of new facilities under Wis. Stats. § 196.49 and Wis. Admin. Code ch. PSC 133, including verifying application completeness, evaluating the documentation of project need and costs, reviewing proposed engineering and construction practices, and identifying alternatives.

B2. Prepare data requests, reports, working papers, and other documentation, as necessary.

B3. Assist Chief Engineer, the Pipeline Safety Program Manager and other Commission staff to address concerns or questions they may have related to the project(s).

B4. Perform field investigations, as required before, during and after construction, in order to assist in the assessment of project(s) needs.

B5. Assist in developing recommendations on project(s) based upon engineering analyses performed.

B6. Assist in the preparation of testimony and exhibits of analyses and conclusions, staff memoranda, draft orders, and other documents.

B7. Review construction progress reports filed by utilities to determine if project is on schedule and within approved costs.

B8. Assist in the analysis of final costs upon completion of construction and investigate excessive cost variance, as necessary.

B9. Review, or assist in reviewing, construction applications to ensure that proposed facilities are operated and constructed in accordance with applicable state and federal pipeline safety regulations.

5% C. Enforcement of Gas Service Standards

C1. Inspect records maintained by utilities, field inspect gas utility operations, distribution facilities and associated equipment to determine compliance with requirements under PSC Chapter 134, Wis. Adm. Code and utility rules on file with the Commission.
C2. Assist in investigation of specific problems, suspected or indicated deficiencies, or new issues in technically-related areas. Prepare report(s), including documentation of review, conclusions and recommendations.

C3. Compile and analyze reports filed by utilities as required by the Commission so that selected performance indicators can be evaluated.

C4. Communicate results of analysis with utility personnel, including recommendations for improvements. Follow-up and monitor utility compliance and progress related to staff recommendations for improvements or utility actions.

C5. Assist with research or investigation of technical matters related to natural gas service and safety. As necessary and either prepare a written report on the subject, or convey the needed information verbally to the Gas Pipeline Manager and Chief Engineer.

5%  D. Investigation of Complaints Related to Gas Service and Safety

D1. Assist in investigation of complaints, specific problems, suspected or indicated deficiencies, or new issues of a technical nature related to natural gas service and safety.

D2. Collect additional information from utility or complainant as needed. Conduct field investigations if required.

D3. Document investigation steps and communications in the PSC Customer Complaint System (CCS) and identify or assist in developing a resolution to the complaint.

D4. Notify complainant and utility of results of investigation, and prepare report, letter, or memorandum with conclusions and recommendations, as needed.

D5. If exception is taken to informal resolution, assist with preparation of a memo on complaint to the Commission and letter of resolution for Commission approval. After Commission approval, conduct necessary follow-up and closing of the complaint procedures.

5%  E. Maintenance and Improvement of Professional Proficiency

E1. Assist in developing, revising and implementing overall Pipeline Safety Program objectives, policies, and responsibilities.

E2. Review technical literature to keep abreast of current issues and developments in gas service, safety and regulation.

E3. Review statutes and administrative codes to expand knowledge of regulations pertaining to gas utility regulation and other related matters.

E4. Participate in seminars, conferences, in-house training sessions and formal educational programs to develop job-related knowledge.

E4. Attend mandatory federal training regarding federal rules and procedures.
KNOWLEDGE, SKILLS AND ABILITIES

1. This position requires a bachelor’s degree in engineering or professional engineer’s license, with a preference for civil or mechanical engineering.

2. Knowledge of engineering theories and principles as applied to the planning, design, construction, and operation of natural gas utility transmission and distribution systems and facilities, particularly fluid mechanics.

3. Knowledge of codes and standards established by the Commission and the Office of Pipeline Safety of the U.S. Department of Transportation, as set forth in the Wisconsin State Statutes and PSC Chapter 135, Wisconsin Administrative Code which includes the adoption of Part 192 and 193 in Title 49, Code of Federal Regulations.


5. Knowledge of utility regulation, including knowledge of the Public Service Commission policies and procedures, Wisconsin Statutes, and Wisconsin Administrative Code.

6. Ability to conduct field inspections of utility facilities, construction sites, and occasionally natural gas explosion sites, which at times are in adverse weather conditions and may require entering potentially hazardous sites.


8. Ability to obtain and maintain a valid Wisconsin Driver’s license.

9. Ability to travel frequently, including three consecutive nights out of the home office. A minimum of 85 inspections days is required per year.

10. Knowledge of appropriate safety procedures, requirements, and techniques, including the ability to apply and adhere to safe workplace practices.

11. Ability to comply with federal Drug-free Workplace Act of 1988, as amended.

12. Knowledge of quantitative methods of analysis, including engineering economics.

13. Knowledge of computing technology for engineering and standard office software, such as Microsoft Word and Excel.

14. Knowledge of methods for establishing and maintaining effective working relationships with co-workers, subordinates, representatives of regulated utilities, the public and other governmental agencies and organizations.

15. Skill in managing projects, including multiple projects simultaneously.

16. Ability to communicate effectively both verbally and in writing, including excellent interpersonal communication skills.
17. Ability to work both independently and as part of team.

The goals and work activities listed are intended to describe the essential functions of persons assigned to this job. They are not intended as an exhaustive list of all job duties, responsibilities, and requirements.