

POSITION DESCRIPTION

DER-DCC-10 (Rev. 5-84)
State of Wisconsin
Department of Employment Relations

1. Position No. 301024	2. Cert / Reclass Request No.	3. Agency No. 155
4. NAME OF EMPLOYEE	5. DEPARTMENT, UNIT, WORK ADDRESS Public Service Commission of Wisconsin 610 North Whitney Way Madison WI 53705-2729	
6. CLASSIFICATION TITLE OF POSITION Public Service Engineer	8. NAME AND CLASS OF FORMER INCUMBENT	
7. CLASS TITLE OPTION (to be filled out by Personnel Office)	10. NAME AND CLASS OF EMPLOYEES PERFORMING SIMILAR DUTIES	
9. AGENCY WORKING TITLE OF POSITION Electrical Engineer	12. FROM APPROXIMATELY WHAT DATE HAS THE EMPLOYEE PERFORMED THE WORK DESCRIBED BELOW?	
11. NAME AND CLASS OF FIRST-LINE SUPERVISOR Randy Pilo, Assistant Administrator		

13. DOES THIS POSITION SUPERVISE SUBORDINATE EMPLOYEES IN PERMANENT POSITIONS? Yes No
IF YES, COMPLETE AND ATTACH A SUPERVISORY POSITION ANALYSIS FORM (DER-PERS-84).

14. POSITION SUMMARY – PLEASE DESCRIBE BELOW THE MAJOR GOALS OF THIS POSITION:

SEE ATTACHED

15. DESCRIBE THE GOALS AND WORKER ACTIVITIES OF THIS POSITION (Please see sample format and instructions on back of last page.)

- GOALS: Describe the major achievements, outputs, or results. List them in descending order of importance.
- WORKER ACTIVITIES: Under each goal, list the worker activities performed to meet that goal.
- TIME %: Include for goals and major worker activities.

TIME %	GOALS AND WORKER ACTIVITIES	(Continue on attached sheets)
	SEE ATTACHED	

16. SUPERVISORY SECTION - TO BE COMPLETED BY THE FIRST LINE SUPERVISOR OF THIS POSITION (See Instructions on back of last page)

- a. The supervision, direction, and review given to the work of this position is [] close [] limited [x] general.
- b. The statements and time estimates above and on attachments accurately describe the work assigned to the position. (Please initial and date attachments.)

Signature of first-line supervisor _____ Date _____

17. EMPLOYEE SECTION - TO BE COMPLETED BY THE INCUMBENT OF THIS POSITION

I have read and understand that the statements and time estimates above and on attachments are a description of the functions assigned my position.
(Please initial and date attachments.)

Signature of employee _____ Date _____

18. Signature of Personnel Manager _____ Date _____

DISTRIBUTE COPIES OF SIGNED FORM TO:

P-FILE EMPLOYEE SUPERVISOR CERT REQUEST COPY

Position Summary: Under general supervision of the Assistant Administrator and Division Administrator of the Division of Regional Energy Markets (DREM), serve as an Electrical Engineer in the area of regional energy markets. Primary responsibilities involve the review and analysis of electric transmission system plans, including the performance of transmission systems within the regional energy markets as defined by the Midcontinent Independent System Operator (MISO), other regional transmission organizations/independent system operators (RTO/ISO), and Regional State Committees (RSC) involving state and federal authorities including the Commission, or as assigned by the Assistant Administrator and Division Administrator.

The research and analysis performed will contribute to the practical understanding of engineering issues and problems facing electric utilities in Wisconsin. This position contributes technical expertise on multidisciplinary issue teams associated with wholesale energy markets, transmission planning, purchase power agreements, generation resource adequacy, adequacy of the transmission system to export and import power, environmental externalities, short- and long-term electric supply, and demand assessments in Wisconsin.

The position requires independent performance in technical and complex matters affecting a broad range of utility regulation issues and requires a high level of independent decision-making. This includes responsibility for producing extensive written materials and operating within tight timelines. Use of confidential electric utility information and data is required.

% Time/Goals and Worker Activities

- 50% A. Provision of policy support and technical expertise from an engineering perspective on investigations (both formal and informal), special projects, and research assignments.
- A1. Participate as part of a team or work group on complex projects or special studies involving policy formation, especially with respect to issues related to engineering.
 - A2. Lead, direct, and participate as key analyst in special moderately complex projects involving important engineering issues affecting wholesale market developments, RTO, and RSC issues and new electric generation and transmission construction.
 - A3. Monitor and participate in policy development and issue identification at RTOs and RSCs, including state and federal authorities and defined by the Commission. Provide input to the Commission's development of appropriate short- and long-range engineering policies that are beneficial to Wisconsin and impact these institutions.
 - A4. Thoroughly examine issues by utilizing engineering models and other analytical tools and techniques. Use these findings for inclusion in reports, studies, and other resources that are used by the Division and other organizations.
 - A5. Participate actively in division issue teams from an engineering perspective.
 - A6. Monitor and keep abreast of engineering developments in wholesale energy markets, developments regarding electric transmission, and generation development.
 - A7. Prepare reports, memoranda, testimony, or other Commission-required documents as appropriate, and as assigned by the Division Administrator.
 - A8. Work professionally and cooperatively with similar professionals working for other state Commissions on related subjects, as necessary or as assigned.
 - A9. Work professionally and cooperatively with similar professionals working on related subjects for PSCW-regulated utilities, as necessary or as assigned.

- 35% B. Identification of key events, trends, policies, programs, issues, and utility proposals affecting the state's and region's electric utility industry. Analysis of policy and engineering implications of complex regulatory structure changes for electric utilities. Develop of appropriate policy responses consistent with practical application of current engineering concepts or practices.
- B1. Conduct studies, modeling, analysis, and research on complex electric policy issues and topics for the agency.
 - B2. Advise the Commissioners and Core Management Team of the Division of Regional Energy Markets on issues, policies, trends, and events affecting the state's and region's electric utility industry.
 - B3. Participate in the Strategic Energy Assessment. Provide input to the Commission's long-range electric generation and transmission planning efforts. Assist the Commission's development of appropriate economic policies fostering electric system reliability and competitive pricing.
 - B4. Develop and implement appropriate modeling methods to analyze transmission issues.
 - B5. Prepare and present the results of transmission analyses in testimony and exhibits in formal proceedings and as reports.
 - B6. Monitor and track the status of the electric industry in the various states and at the federal level.
 - B7. With respect to electric transmission issues, assist legal staff in the drafting of briefing memoranda, decision matrices, and Commission orders.
 - B8. Other electric transmission analysis duties as assigned.
- 5% C. Investigations into compliance with Wis. Admin. Code Ch. PSC 111-Requirements for Strategic Energy Assessments.
- C1. Participate in and materially assist DREM team and utility coordination efforts in review, analysis, development, monitoring, and follow-up in a wide variety of engineering and planning issues related to the Strategic Energy Assessment.
 - C2. Prepare data requests and templates necessary for compilation of the Strategic Energy Assessment.
 - C3. Perform, coordinate, or assist with engineering review and analysis of basic generation and transmission plans.
 - C4. Perform revisions, interpretations, or other administrative duties to implement or enforce Administrative Code requirements.
- 10% D. Participation in a variety of special projects involving complex regulatory issues as assigned by the Management Team of the Division of Regional Energy Markets. Provision of electrical engineer's perspective.
- D1. Assess and analyze regional energy markets, including the Mid Continent System Operator and other regional transmission organizers and independent system operators.
 - D2. Analyze cost allocation plans, transmission plans, and other proposals advanced by the regional transmission organizers and independent system operators.
 - D3. Analyze effects of changes in state/federal law, or federal rules and Federal Energy Regulatory Commission Orders, relative to their on Wisconsin utilities and ratepayers.
 - D4. Analyze effects of utility business activities, including conducting market power studies.

- D5. Provide technical expertise and advice through participation on issue teams associated with engineering and transmission planning, competitive bidding, environmental externalities, forecasting, rates, and utility engineering.
 - D6. Assist Commission engineering and auditing staff with economic assumptions and inputs required to electronically model a utility's electric system costs.
 - D7. Perform electric supply and demand assessments, and monitor and track wholesale electricity prices.
 - D8. Work with public utility engineers and consultants as appropriate.
 - D9. Prepare oral and written presentations, reports, and memoranda as needed.
- 5% E. Participation in professional training and education to keep abreast of significant developments in the art and science of utility regulation and research. This includes formal, structured training sessions as well as independent study, reading, and research, and also includes the improvement of professional proficiency.
- E1. Review engineering studies, white papers, and reports prepared by academic researchers, other governmental agencies, and consulting firms on the subjects of electric utility engineering and economics and developing technologies as related to the electric power industry.
 - E2. Review and keep current with revisions to state statutes, administrative codes, federal laws, or regulations related to electric utility regulation.
 - E2. Assist with maintenance of a collection of reference materials on utility engineering subjects in cooperation with other Commission staff.
 - E3. Attend and participate in seminars, academic courses, conferences, in-house training, and other formal or informal educational programs to further develop knowledge of electric power system engineering; engineering economics; generation, transmission, and distribution system planning; related data processing; regulatory issues; and other job related areas.
 - E4. Review statutes, administrative code, and other Commission rules and regulations.
- 5% F. Development and implementation of division objectives and operations.
- F1. Assist DREM Division Administrator in developing, revising, and implementing overall division objectives, policies, and responsibilities.
 - F2. Assist with routine duties such as attending meetings and other division responsibilities as assigned by the Division Administrator and Assistant Administrator.

KSAs (Knowledge, Skills, and Abilities)

1. Familiarity with statutes, administrative code regulations of Wisconsin as they apply to regulated utilities, and the Electrical Code, as well as familiarity with relationships between Wisconsin regulators and federal regulators.
2. Working knowledge of electrical engineering theories and principles as related to power generation, transmission, and distribution systems and the planning of electric utility facilities.
3. Working knowledge of regional transmission organizations and independent system operators, including all aspects of the associated energy markets.
4. Working knowledge of the public utility concept and utility regulation theory.
5. Working knowledge of energy utility structure and operation.

6. Some knowledge and familiarity with environmental regulations impacting utility operations and cost structure.
7. Ability to communicate effectively, both in writing and verbally, in a clear, concise, and correct manner with divergent audiences on adversarial topics.
8. Ability to conduct site visits and reviews of engineering aspects of utility operation, regional transmission organizations, and independent system operators. Travel in state and out-of-state is occasionally required, with out-of-state usually requiring overnight stays. Out-of-state travel is primarily focused on the Indianapolis and St. Paul areas.
9. Working knowledge of rates and rules, service areas, power system and operating practices, and characteristics of Wisconsin electric utilities.
10. Working knowledge in the use of specialized engineering analysis and modeling applications, such as EGEAS, PROMOD, or similar systems.
11. Considerable knowledge in the use of personal computers for engineering modeling.
12. Proficiency in spreadsheet, presentation and word processing programs such as Microsoft Excel, Power Point, and Word.
13. Ability to work both independently and in cooperation with agency staff, utility representatives, interveners, consultants, and personnel from other governmental agencies.
14. Basic skills in making presentations and presenting reports.
15. Extensive ability to use the internet to procure relevant economic and engineering data.
16. Working knowledge of engineering economics as it applies to public utilities.