

PUBLIC UTILITY DISTRICT NO. 1 OF
GRAYS HARBOR COUNTY, WASHINGTON

POSITION TITLE: Transmission and Distribution Engineer Level III
REPORTS TO: System Engineering Supervisor
SUPERVISES: None
UNION AFFILIATION: I.B.E.W. System Engineers
PURPOSE OF POSITION: Performs complex electrical engineering work required for the planning, design, construction, operation, and maintenance of the distribution and transmission systems. This position requires knowledge of the principals, practices and procedures, including materials, equipment and techniques, used in professional level work in the field of electrical transmission and distribution engineering.

DUTIES AND RESPONSIBILITIES

A) DESIGN AND MAINTENANCE

- 1) Perform routine and complex electrical engineering design and analysis for projects.
- 2) Preparation of specifications for contractor bids on distribution system construction projects.
- 3) Coordinate projects and other activities and work with contractors and consulting engineers on design, construction and specifications of distribution and transmission projects as assigned.
- 4) Evaluate, prepare and recommend distribution system protection coordination schemes.
- 5) Conduct fault studies for proper application of fuses, reclosers and substation relay settings.
- 6) Conduct transmission and distribution system analysis studies for power flows, voltage, power factor, and system stability to optimize the operation of the transmission and distribution systems.
- 7) Perform economic evaluations and cost estimating for distribution and transmission system projects and operation.
- 8) Prepare long range plans and construction work plans.
- 9) Monitor progress of construction projects.
- 10) Recommend for approval contractor change orders and payments.
- 11) Provide recommendations in establishing or revising construction standards.
- 12) Coordinate and review work submitted by consultants and suppliers as assigned.
- 13) Work and coordinate with governmental agencies for relocation of District facilities due to road improvement and other projects.
- 14) Provide instruction and answers to questions concerning design issues.

B) GENERAL ENGINEERING

- 1) Provide electrical engineering support to other departments.
- 2) Develop and update computer analysis programs or tracking systems for appropriate projects.

- 3) Provide technical assistance in investigation of customer power quality issues.
- 4) Prepare information for right-of-ways and permits on facilities construction and operation.
- 5) Serve as a technical expert in an electrical engineering specialty area.

C) OTHER

- 1) Participate in presentations, special projects, and assignments as directed.
- 2) Perform other duties as assigned.

QUALIFICATIONS

KNOWLEDGE, SKILLS AND ABILITIES

Thorough knowledge of applicable laws, codes, standards, and accepted safety practices relating to electrical utility work.

Demonstrated knowledge of power system studies and electrical power system design.

Demonstrated ability to perform complex power system fault analysis and protective device coordination studies.

Thorough knowledge and understanding of electrical engineering principles, practices, and procedures relating to overhead and underground distribution and transmission facilities.

Knowledge of engineering fundamentals, drawings, designing and mathematics.

Knowledge in the operation of personal computers and office equipment.

Ability to observe all health and safety regulations and use safety equipment when necessary.

Demonstrated ability to communicate effectively orally and in writing with all levels of the organization, contractors, and customers.

Demonstrated ability to complete assignments in a timely and accurate manner.

Demonstrated ability to solve complex problems and work independently, with limited supervision.

Performance at this level requires developmental experience gained at the Transmission and Distribution Engineer II level or equivalent work experience.

EDUCATION AND EXPERIENCE

Bachelor of Science Degree in Electrical Engineering from an accredited college or university; or other combination of education and/or experience which provides the necessary skills to perform professional electrical engineering work on electrical power systems.

Minimum of 8 years of relevant experience

OTHER REQUIREMENTS

Must possess a valid Washington State driver's license (out of state residents have 30 days from date of hire to obtain a valid Washington State driver's license) and qualify for the District's auto liability insurance.

WORKING CONDITIONS

Work is performed in an office and in the field. Individual may be exposed to conditions and hazards from brush, obstacles, debris, holes, fences, and open trenches associated with construction sites and/or rural areas of service; and to conditions and hazards associated with decrepit buildings. Individual is exposed to electrical high voltage lines. Individual may be exposed to aggressive animals. This position may necessitate working beyond normal business hours. Overnight travel may be required.

PHYSICAL ACTIVITIES

This position requires periods of frequent sitting, standing, walking, lifting (50 pounds or less), crouching, bending, and travel to perform construction site inspection and reconnaissance activities in all types of weather conditions. These responsibilities could not be fulfilled by individuals with severe restrictions in mobility, sight, hearing, or speech.