JOB DESCRIPTION

SYSTEM PLANNING ENGINEER

This position reports to the Chief Electrical Engineer. Analyze, investigate, and record the performance of the transmission and distribution system. Such analysis shall include load flow studies, fault current studies, power quality studies, co-ordination studies, reliability studies, etc. Analyze, investigate, and record service continuity. Receive and process outage information. Prepare, assemble, and distribute outage indices and system reliability reports. This position is subject to RP&L’s Drug and Alcohol Free Policy. This includes pre-employment testing, post-accident testing, reasonable suspicion testing, return-to-duty testing and follow-up testing.

Typical performance duties include but are not limited to the following:

A. Make recommendations to engineering management regarding new or improvement projects, processes, devices, or settings to the transmission and distribution system.

B. Design and layout electrical, communication, and lighting facilities; including repair, replacement, rebuilding, relocation and installation of facilities as necessary. Prepare detailed work orders/estimates using the Utility Management System (UMS) or other electronic process. Prepare detailed work order/estimate drawings using a PC workstation equipped with AutoCAD drafting software. Post “as-built” information to all pertinent engineering records.

C. Manage projects; including designing, procuring materials, scheduling, and participating in oversight and assisting customer personnel.

D. Provide service, technical, and billing assistance to both internal and external customers.

E. Evaluate transmission and distribution products, materials, devices, techniques, and processes. Recommend applicability to utility.

F. Obtain easements required for construction and maintenance of facilities. Process requests from RP&L customers regarding service to their entrance panels.

G. Develop AutoCAD generated constructive/maintenance drawing files and UMS databases to represent changes to transmission and distribution equipment. Reproduce printed copies, assemble and distribute as required.
H. Consult with RP&L customers and/or their respective electrical contractors regarding installation and maintenance of electrical service, consistent with RP&L General Terms and Conditions of Electrical Service.

I. Assist engineering management with the development of new standard construction devices, materials, and units including drawings of tentative construction, obtaining necessary materials and tooling, preparing instructions and/or training to Line Department for use of new units and follow-up for execution of new standards.

J. Maintain pole contact records and billings for phone, cable, electric utility and other facilities.

K. Keep master list of all transmission and distribution inventory items up-to-date.

L. Maintain work equipment and areas in clean, orderly condition. Continuously observe utility safety rules and practices. Check condition of safety equipment.

M. Attend scheduled safety meetings. Become familiar with utility’s safety manuals, rules and special procedures.

N. Participate in service restoration and outage response.

O. Perform other jobs as assigned.

Mental Application: This person must be mentally and psychologically able to perform all of the required duties. Will be required to follow and carry out both written and verbal orders using good judgment and common sense.

Contacts: Typical job duties involve interaction with customers. This interaction may contain confidential or highly sensitive information. The employee must have a clean and orderly appearance and relate to customers in a friendly, professional manner. The employee may encounter and be required to resolve conflict with a confused or hostile customer.

Expenditures: This position is expected to operate within approved budgetary allowance and follow company purchasing policy and procedures.
Working Conditions: The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Most duties occur indoors. A significant amount of work shall occur outdoors, possibly on uneven or undeveloped terrain. The employee may be exposed to wet or extreme hot or cold conditions. The employee may occasionally work in low, confined or precarious places and may be exposed to fumes, airborne particles, and have risk of electrical shock.

Some duties require travel, including air travel and overnight stays.

Most duties require conceptual thinking, detailed analysis, good judgment, and a high degree of responsibility. The ability to successfully manage projects and work independently is essential. Furthermore, the duties require abstract thinking and anticipating future changes, improvements, and needs of the transmission and distribution system.

The noise level in the work environment is usually loud in field setting, and moderately quiet in office settings.

Equipment:
Motor vehicles, various hand operated tools and measuring devices, cameras, survey and GPS devices, computers, and communication equipment.

Physical Demands: The physical demands described here are representative of those which must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee must occasionally lift and/or move up to 50 lbs.

Utility needs will require the employee to work overtime and irregular hours under unusual or special working conditions; storms, extreme temperatures, high winds, darkness, etc.

Required Tests:
Ability to use AutoCAD software.
Ability to interpret the National Electrical Safety Code
Qualifications:

A. Must be a high school graduate or have an approved GED certificate or applicable equivalent in either job training or study.

B. Must have a Bachelor’s Degree or higher in an engineering field of study from an accredited university.

C. Must have significant knowledge of and experience with transmission and distribution system operation and AC electricity.

D. Must have working knowledge of AutoCAD software.

E. Must have working knowledge of Milsoft’s “WindMil” analytical software or equivalent.

F. Must have working knowledge of computer operation.

G. Must be able to read and interpret electrical blueprints, printed circuits, etc.

H. Must be able to interpret and apply the National Electrical Safety Code.

I. Must be familiar with and able to use basic electrical test equipment.

J. Must have mobility and finger/limb dexterity.

K. Must be detail oriented and have ability to develop accurate drawings, records, and plans.

L. Must be able to think conceptually.

M. Must be able to manage multiple, complex projects.

N. Must demonstrate effective team leadership and management skills.

O. Must be able to learn and present technical skills and processes.

P. Must have good communication and writing skills.

Q. Must have a valid motor vehicle operator’s license.

Reports to: Chief Electrical Engineer

01/01/2014