Jurisdictional Class: Competitive
Adopted: November 27, 2012
Revised:

JUNIOR ELECTRICAL ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: This is a junior-level engineering position under the direct supervision of a Licensed Professional Engineer involving responsibility for the design, maintenance, and construction of electrical structures and/or systems for the Plattsburgh Municipal Lighting Department (MLD), and for conducting field inspections of electric maintenance and construction projects. An incumbent in this position is required to take part in standby duty and respond to system emergencies. The incumbent does related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative only)

The duties listed below are performed under the direction and supervision of a Licensed Professional Engineer:

Performs routine field and office engineering work in the design, maintenance, repair, and construction of transmission and distribution substations, electric power transmission and distribution lines, service lines, traffic signal systems, street lighting systems, and associated system plants and equipment;

Prepares plans, cost estimates, and specifications for all maintenance, repair, and new construction projects connected with transmission and distribution substations, transmission and distribution lines, traffic signals, and street lighting systems and inspects the maintenance, repair, and new construction projects for compliance with contract specification and engineering standards and initiates installation or removal of equipment within the system;

Reviews contractor's proposals, bids, and contracts for compliance with engineering standards, City ordinances, resolutions, and Codes, along with MLD rules and policy;

Assists in evaluating electrical structures and systems to determine maintenance and rehabilitation needs, evaluates the preventive maintenance program, and develops requests for proposal;

Determines metering requirements with the metering department;

Performs routine calculations;

Prepares simple graphs, tables, and curves;

Performs basic drafting and minor detail design;

Reviews and compiles information from technical engineering manuals, electric system studies, and reports;

Collects and analyzes information and data to determine the need for and scope of repair or improvement projects, new projects, and redesign of existing structures and systems;

Prepares layout and detail drawings on routine projects from specific instructions, notes, and sketches;

Visits project sites to obtain information and documents work by taking measurements, preparing simple sketches, and completing written reports and forms;

Meets and confers with consumers, contractors, engineers, inspectors, vendors, and other municipal departments relating to power requirement for future development, electrical system problems, and other related matters;

Provides information and assists in preparing reports to the New York Public Service Commission, Federal agencies, and other regulatory bodies as required.

Junior Electrical Engineer

FULL PERFORMANCE, KNOWLEDGE, SKILLS ABILITIES & PERSONAL CHARACTERISTICS:

Good knowledge of the principals of electrical engineering;
Good knowledge of mathematical, physical, and engineering sciences;
Knowledge of the electrical engineering problems involved in the design, maintenance, repair, and construction of electrical systems;
Knowledge of construction inspection practices and procedures;
Knowledge of the NESC, NEC, and OSHA requirements as they relate to the electric utility;
Working knowledge of computer systems and computer software programs;
Ability to apply basic engineering concepts, theories, and practices;
Ability to analyze and evaluate data to resolve basic engineering problems;
Ability to maintain records and file;
Ability to obtain cooperation from outside organizations and agencies;
Ability to develop a good working relationship with others;
Ability to instruct technical procedures, processes, and techniques to other employees;
Ability to express oneself in a clear and concise manner on technical subjects;
Ability to maintain calmness and coolness during emergency situations.

MINIMUM QUALIFICATIONS: Either:

(a) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's degree in civil, mechanical, or electrical engineering or engineering technology, and one (1) year of experience in electric utility operations and construction; or

(b) Graduation from high school or possession of a high school equivalency diploma and six (6) years of experience as described in (a) above; or

(c) An equivalent combination of training and experience as defined by the lines of (a) and (b) above.

SPECIAL REQUIREMENTS FOR ACCEPTANCE OF APPLICATIONS: Possession of an Engineer-in-Training Certificate (EIT) from any state.

Eligibility for a New York State Class "D" Driver's license at time of application; possession within six (6) months of appointment.

NOTE: Your degree must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of Education. If your degree was awarded by an educational institution outside the United States and its territories, you must provide independent verification of equivalency. A list of acceptable companies who provide this service can be found on the Internet at http://www.cs.ny.gov/jobseeker/degrees.cfm. You must pay the required evaluation fee.