



NON-BARGAINING UNIT JOB POSTING

**POST:
Internal/External**

DIVISION: Electric Operations

DEPARTMENT: Electric System Integrity

MAXIMUM # OF OPENINGS: 1

JOB TITLE: Electrical Engineer

MARKET RATE: Engineering & Scientific Grades 1-3 (\$47,000-\$90,200)

GENERAL SUMMARY OF DUTIES:

Responsible for electrical engineering activities related to designing, constructing, operating and maintaining electric, water, steam, and chilled water production facilities, substations, transmission and distribution facilities and common facilities. Most projects will involve some or all of the following activities: investigations, studies, estimating, economic evaluations, budgeting, scheduling, designing, drawing development, construction, training, start-up activities and project management.

ESSENTIAL FUNCTIONS:

- Provides technical knowledge and design services for multi-discipline projects such as substation construction and expansion, transformers, large and small horsepower motors, variable frequency drives, lighting, and metal enclosed switchgear.
- Develops detailed designs and critical design calculations, material, equipment and construction specifications, bid documents, construction drawings, system start-up and operating procedures, etc. in compliance with BWL purchasing policies and procedures.
- Solicits bids, evaluates bids, and recommends awards. Selection of equipment for various power and control electrical systems. Perform complex, specialized engineering assignments as the technical expert with the ability to conduct required research, evaluate data, and prepare clear and well-documented reports giving recommendations and/or presenting findings, and make presentations to Management.
- Ensure project needs for administrative approvals, legal/safety/environmental reviews, permits, easements; licenses, etc. are identified, properly obtained and complied with in a timely manner.
- Complete assignments within appropriate quality guidelines, budgets and schedules to achieve overall objectives.
- Ensure that project documents, drawings, and records are properly monitored, filed and maintained.
- Studies, monitors and evaluates systems, equipment and structures to develop project plans, scopes and conceptual designs using engineering studies, field investigations, O&M records and data, customer input, design and operating/performance criteria, plant operations and maintenance personnel input, outage requirements, etc.
- Keep abreast of industry laws, codes, standards and regulations.
- Follow and enforce the BWL Safety Manual and wear personal protective equipment as required.
- Attend training for safety awareness or skills improvement as required by supervisor, BWL or governmental agency such as MIOSHA.
- Other duties as assigned by supervisor.

JOB SPECIFICATIONS:

- **KNOWLEDGE**
- **SKILLS**
- **ABILITIES**

Required: Bachelor's degree in Electrical Engineering from an ABET accredited university, with 6 months to five years of related experience. This position requires thorough knowledge of principles, practices and methods used in the construction of electrical systems; thorough appreciation, understanding and experience of economics and project management. Grade is dependent on years of experience. Knowledge of Microsoft Office, Auto-CAD, and Project Scheduling software (e.g., Primavera or MS Project). Knowledge specific to Substation Protection and Control, large transformers, large and small horsepower motors, variable frequency drives, or metal enclosed switchgear. Working knowledge of National Electric Safety Code and National Electric Codes. Position requires skills and abilities in leadership, initiative, decision making, and clear and concise communication. Must have valid driver's license with acceptable driving record.

PHYSICAL REQUIREMENTS:

Field inspections and measurements require traversing various terrains (including construction sites, operating plants, walking across grating, confined spaces), climbing, ability to observe site conditions, stooping, bending, kneeling and crouching. Able to be fit with respirator. Ability to lift materials weighing up to 30 pounds. AutoCAD and other computer usage require visual acuity and physical dexterity to use monitor, develop drawings and computerized sketches and to input data using keyboard, mouse, trackball, etc. Ability to retrieve information from handwritten and typed design, reference and operational manuals, computerized data and information systems and drawings. Contacts with design personnel, vendors, construction crews, customers, and others require good verbal and written communication skills. Must be able to drive a vehicle. Frequently required to sit, talk, hear and listen. Must provide own transportation to offsite meetings, plants, and construction sites on demand.

WORKING CONDITIONS:

Generally moderate noise level. Normal office environment with frequent field exposure to operating plants and construction sites involving excessive heat, cold, dust, dirt, noise, heights, coal dust, fly ash, asbestos, etc.

TO APPLY:

Email resume, cover letter and application to bwjobs@lbwl.com with *EE-ESI 1-3* in subject line, or mail documents to: Human Resources, Attn: *EE-ESI 1-3*, P.O. Box 13007, Lansing, MI 48901. Applications may be downloaded from BWL website at www.lbwl.com. **Application accepted until filled.**

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