



October 20, 2023

JOB OPPORTUNITY

**System Engineer I
Monroe location-1 position available**

Posted to internal employees and external applicants

PURPOSE OF POSITION:

To formulate effective engineering plans for the orderly expansion of the system's electric plant consistent with current and projected power demands. Responsible for distribution system performance and system planning. Develop effective and strategic initiatives and solutions to support Engineering and Operations.

QUALIFICATIONS:

All requirements are subject to possible modifications to reasonably accommodate individuals with disabilities. Some requirements may exclude individuals who pose a direct threat or significant risk to the health and safety of themselves or other employees. Require to satisfactorily pass Walton EMC's employment entrance examination and drug screen.

EDUCATION AND EXPERIENCE:

Require four-year undergraduate Engineering Degree from an ABET accredited institution. Strongly prefer Electrical Engineering Degree. Must acquire Fundamentals of Engineering Registration within one year of employment. Require excellent verbal skills and written communication skills to document and present recommendations and results of assigned projects.

LANGUAGE SKILLS:

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

MATHEMATICAL SKILLS:

Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

REASONING ABILITY:

Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

COMPUTER SKILLS:

To perform this job successfully, an individual should have knowledge of Microsoft Windows, Spreadsheet, Database, Engineering Analysis, Overcurrent Coordination, and Software Development. Prefer experience in SQL, Java, or other applicable programming languages that interface with database systems.

CERTIFICATES, LICENSES, REGISTRATIONS:

Require the ability to be DOT certified; to have and maintain a valid Georgia driver's license. Require Fundamentals of Engineering Registration within one year of employment

PHYSICAL DEMANDS:

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, or feel and reach with hands and arms. The employee is frequently required to sit. The employee is occasionally required to stand, walk; climb or balance; stoop, kneel, crouch, or crawl and talk or hear. The employee must regularly lift and /or move up to 10 pounds, frequently lift and/or move up to 25 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus. Individual must be able to use extended stick and ammeter for checking currents on OH lines and in substations. Must be able to sit at desk using computer for extended periods. Must be able to distinguish colors and have good close vision. Must be capable of safely entering high voltage substations to take measurements and record instrumentation readings.

WORK ENVIRONMENT:

Primary general office conditions, occasional fieldwork, occasional business travel. Irregular hours as deemed necessary by the position. Exposure to outside environmental conditions on an infrequent basis.

WORKING RELATIONSHIPS:

Internal: Two-way communication with immediate supervisor on job related matters. Provide coordination with other departments to communicate any necessary information.

External: Demonstrate an awareness that the job exists to effectively serve each and every member, and at every opportunity to achieve increased member and public understanding for the support of the cooperative.

This position is an Exempt Grade 3207E. Minimum salary is \$89,965.00 annually.

Applications will be accepted until Friday, November 3, 2023. Internal applicants may apply by written internal application with the Human Resources Department. Outside applicants may apply by written application at the Monroe, Snellville, or Watkinsville Office. May fax resume to 770-266-2544 or email to careers@waltonemc.com. Contact Human Resources with any questions.

**WALTON ELECTRIC MEMBERSHIP CORPORATION
SYSTEM ENGINEER I
ENGINEERING AND OPERATIONS DEPARTMENT
LEVEL 3207E**

ESSENTIAL DUTIES AND RESPONSIBILITIES

The following are the essential duties of this position and do not include marginal functions that are incidental to the performance of fundamental job duties. The scope and duties of a given position may change or be temporarily altered based on the business needs of Walton EMC. This document does not create an employment contract, implied or otherwise, other than an "at will" employment relationship.

I. System Planning

- ☐ Support preparation of two-year work plan, long range planning report and other related engineering studies ensuring reports and studies are complete and accurate and submitted in a timely manner.
- ☐ Maintain load growth related trend data (substation meter point, SCADA, AMI, consumer accounts, weather) in engineering databases for the system and analyzes its significance to current electric plant capability.
- ☐ Build and maintain Walton EMC's electric data model in engineering analysis software.
- ☐ Conduct voltage profiles on substation feeds to determine any needed correction to voltage condition.
- ☐ Conduct ampere balance profiles on substations, substation feeds, and linesections to determine if any correction is needed to maximize capacity of electric plant taking into account for switching scenarios.
- ☐ Support load forecast studies to determine future power requirements for the cooperative.
- ☐ Analyze system power loss trends and makes recommendations as deemed necessary for economical operation.
- ☐ Conduct arc flash studies and maintain arc energy tables.
- ☐ Support C&I Executives with customer choice loading and other initiatives as needed.

II. Power Quality

- ☐ Investigate residential power quality issues to help arrive at a solution that is amicable to residential consumers and Walton EMC.
- ☐ Review residential voltage recordings set by the meter shop against power quality standards and to determine any needed correction to the power quality condition by Walton EMC.

- ☐ Support investigating commercial and industrial power quality issues to help arrive at a solution that is amicable to commercial and industrial consumers and Walton EMC.
- ☐ Support installing, removing, and reviewing commercial and industrial power quality recorders against power quality standards to determine any needed correction to the power quality condition by Walton EMC.

III. System Protection

- ☐ Support coordination analysis of sectionalizing devices.
- ☐ Analyze electric model and connectivity reports to seek out any miscoordinations among electric distribution overcurrent devices making appropriate corrections.
- ☐ Maintain Schweitzer or other event data files on engineering file servers and engineering databases, and analyze their significance to distribution system reliability.
- ☐ Become familiar with substation equipment relays, overcurrent protection best practices, and automated switching schemes.

III. Reliability

- ☐ Support determining distribution system configurations to improve reliability.
- ☐ Analyze system outage records for determination of plan revisions for the continuation of the desired standard of electric service.
- ☐ Analyze momentary interruption records for determination of plan revisions for the continuation of the desired standard of electric service.

IV. Switching

- ☐ Complete ITS 5 Day Training within 2 years of employment and maintain ITS Certification.
- ☐ Analyze loading data and make recommendations as needed for switching scenarios.
- ☐ Support writing and executing switching orders.
- ☐ Support the engineer on call.

V. Automation and Programming

- ☐ Support automating and maintaining processes for engineering database interfaces including: AMI, OPC power bill, SCADA, OMS, GIS, Schweitzer event files, solar data, Meridian CA and GA data, device loading tables, blink report tables, and other related E&O processes.

- Support creating and maintaining custom applications for engineering and operations including the following systems: AMI data loader for Engineering Analysis, Hawkeye graphical reporting, solar customer tracking for marketing, substation database, substation login, damage assessment, one shot log, padmount numbering, and other related E&O applications.
- Support creating and maintaining custom reports for engineering and operations including: major storm outage, device and individual outage history, transformer loading, device loading, damage assessment, substation log in system, one shot login system, and other related E&O software.

03/2023