

Job Title: Electrical Engineer

This title may also be classified at AES Northeast as one of the following:

- Professional Engineer

Prerequisites: -PE License

-Prior work experience using AutoCAD and/or Revit

-Possession of a valid driver's license

-Ability to perform engineering related field work

Supervisor: This position reports to the Director of the Building Systems Division/Principal MEP Engineer

Basic Job Description/Duties/Responsibilities:

MEP Group Team member, providing design assistance to MEP group and other disciplines relating to electrical system designs for commercial, industrial, institutional, and municipal (water/wastewater) projects. Basic duties and responsibilities will include:

Power Systems (focused on low and medium voltage) – Electrical power distribution, equipment selection, facility load evaluations, circuit analysis and calculations, raceway/pathway designs, grounding systems, emergency/standby power systems.

Lighting Systems – Light fixture selection, photometric modeling, emergency/exit lighting systems, lighting controls, and relevant energy code requirements.

Special Systems – Fire alarm design, data/communication horizontal/backbone design (including pathways), life safety systems, etc.

Control Systems – Knowledge and understanding of building automation and SCADA system controls for HVAC and Water/Wastewater systems.

Codes and Standards – Thorough understanding of National Electric Code, Energy Code, relevant NFPA chapters, IEEE, and others relating to electrical engineering for buildings and building systems.

Summary of Job Duties:

- Perform code research, expand knowledge of codes and standards
- System layout and coordination
- Sizing and selection, spreadsheet development
- Preparation and review of electrical system calculations
- Basic estimating
- Specification writing
- Preparation of reports
- Understanding of development of Basis of Design
- Understanding of relevant codes and standards
- Code research
- Construction document development (using Revit)
- Assistance with proposal development, including hourly estimates
- Training/mentoring of staff,
- Field/site visits during construction to review installed work and verify design intent.
- Construction period support – submittal review, jobsite visits, technical support, etc. during construction phase of projects.
- Preparation of engineering reports

The above list contains basic duties required of the position. This list may not include all of the duties required of the position. This list may be updated from time to time.