**Electrical Engineer**

**Responsibilities**

**Duties and Responsibilities:**

* Collaborate with all people and entities involved in project design, permitting, bidding, and construction including Owners, construction managers, contractors, code officials, consultants, and internal team members.
* Perform electrical system design including performing design calculations, interpreting and preparing reports, preparing cost estimates, and producing deliverable drawing sets including site plans, lighting plans, power plans, communication systems plans, one-line diagrams, schedules, and details.
* Evaluate programmed building or facility use(s) and associated environmental requirements and select the best or most appropriate electrical system(s) to address the specific building needs with emphasis on the project budget and long term operating and maintenance costs.
* Evaluate discipline specific project hourly budgets with special attention to the schedule for project deliverables and establish work plans for each project. Communicate these work plans to electrical project teams and collaborate with project managers, Owners, consultants, and other disciplines so that the timeline for decisions and provision of critical coordination items are clearly understood and anticipated.
* Report status of project progress to Project Managers and Department Director.
* Produce complete, code compliant project contract documents including drawings and specifications to be used for permitting, bidding, and construction.
* Conduct QA/QC reviews for projects engineered/designed by senior electrical engineers/designers, engineers-in-training and technicians, as well as collaborative review of documents for identification and remediation of conflicts with the work of other disciplines.
* Review and ensure compliance with local, state, and federal codes pertaining to life safety, building, and electrical regulations and ordinances; convey applicable changes of local, state, and federal regulations and ordinances to project teams.
* Collaborate with project teams to conduct on-site assessments of existing facilities and prepare electrical engineering systems condition assessment reports. Identify and communicate ideas and plans for remediation of system deficiencies including opportunities for energy cost savings and improving system control and performance.
* Develop electrical systems design narratives, technical studies, and reports.
* Participate in Construction Administration by processing shop drawings, responding to RFI's, and performing site visits during the construction phase to ensure projects are being constructed in accordance to contract documents and applicable building codes.
* Seek continuing education/experience to stay abreast of developments within the field of electrical engineering and building construction.

**Qualifications**

• Ability to plan, track, and manage multiple, simultaneous projects of various scales and types with specific attention to collaboration and quality assurance.
• Ability to communicate effectively and tactfully with project team members, consultants, contractors, and clients both verbally and in written form.
• Ability to lead and motivate teams of engineers and designers with confidence and empathy.
• Willingness to mentor individuals and provide guidance to those with less experience.
• In-depth knowledge of the Electrical sections of Local, State, and Federal Life Safety and Building Codes.
• Proficiency in electrical systems engineering analysis and calculations; lighting, voltage drop, communication systems design, branch circuit and feeder sizing.
• Demonstrated knowledge and proficiency using:

♣ Power system simulation and generator analysis software, such as SKM PowerTools.
♣ Building energy code analysis software such as COMcheck.
♣ Lighting simulation analysis software, such as Visual or AGi32.  Knowledge of ElumTools for REVIT is a plus.
♣ Daylighting analysis software, such as DIVA for Rhino is a plus.

• Demonstrated ability to oversee the:

♣ Layout of electrical receptacles and coordination of power requirements for mechanical equipment, kitchen equipment, medical or owner-furnished equipment, etc.
♣ Creation of power one-line diagrams: normal and emergency power, size power conductors, performing of load calculations, and sizing of switchgear and switchboards.
♣ Selection and layout of light fixtures (interior and exterior) with knowledge of lighting control methodologies a plus.
♣ Design of low-voltage systems: voice and data, nurse call, public address, fire alarm, and intercom, etc. is a plus.

**Education and License Requirements:**

• 7 years working in the Architectural/Engineering profession.
• 10+ years working as an Electrical Designer/Specialist with supervision of project teams and primary responsibility for Lighting, Power, and Special Systems contract documents.
• Verifiable history of successful projects.  Experience with a broad variety of building types is beneficial.
• BSEE degree or a Bachelor of Science degree in Architectural Engineering with an electrical emphasis from an accredited college is required.
• Licensure as Professional Electrical Engineer (PE) is required.
• Registered Communications Distribution Designer (RCDD) is a plus
• LEED accreditation is a plus.