

# Electrical Design Technician

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Reporting To: Engineering Manager  
Department: Engineering  
Job Type: Full-time / Part-time

## Summary

The Electrical Design Technician is responsible for supporting the development and documentation of electrical systems through the creation of detailed schematics, wiring diagrams, panel layouts, and one-line drawings. This role works closely with engineers and project teams to ensure accurate and timely design deliverables that support project execution. The technician will utilize various software to draft and revise electrical documentation and will contribute to arc flash and power system studies by assisting with data collection, system modeling, and compliance reporting. This position plays a key role in maintaining the quality and accuracy of electrical designs while ensuring alignment with industry standards and project requirements.

## Primary Responsibilities

### Electrical Design & Documentation

- Develop and revise electrical drawings such as schematics, wiring diagrams, panel layouts, and one-line diagrams.
- Collaborate with Engineers to create and maintain electrical documentation such as schematics, bills of materials (BOM), panel layouts, and cable schedules.
- Work closely with engineers to translate design concepts into detailed drawings and documentation.
- Create and modify electrical drawings using Eplan or AutoCAD design software to support project development and execution.
- Support documentation changes through revision control and ensure drawings are updated as-built.
- Coordinate with project managers, engineers, and field personnel to gather input and feedback for design accuracy.
- Attend design review meetings and contribute to technical discussions.
- Track and manage design deliverables to meet deadlines and quality expectations.

### Arc Flash & Power System Studies

- Assist in preparing arc flash hazard analyses using SKM software.
- Collect field data with support from electricians to ensure accurate modeling of electrical systems.
- Develop and interpret one-line drawings to support arc flash and power distribution analysis.
- Help generate reports and labeling for arc flash compliance and NFPA 70E safety standards.
- Additional duties as assigned.

## Qualifications

- Associate degree or technical diploma in Electrical Engineering Technology, Drafting/Design, or a related field (or equivalent work experience).
- 1–3 years of experience in electrical drafting or design, preferably in an industrial or construction environment.
- Proficiency with AutoCAD (AutoCAD Electrical preferred) or similar electrical design software.
- Experience or training in EPLAN is preferred, as the role will primarily involve using EPLAN for electrical design.
- Basic understanding of electrical systems, schematics, and industrial control panels.
- Familiarity with creating and interpreting electrical documentation such as wiring diagrams, panel layouts, BOMs, and cable schedules.
- Experience or exposure to power system analysis software (e.g., EasyPower, SKM) is preferred.
- Ability to read and interpret engineering drawings, specifications, and technical documents.

- Strong attention to detail and organizational skills, with the ability to manage multiple projects and deadlines.
- Good communication skills and ability to collaborate effectively with engineers, project managers, and field personnel.
- Willingness to occasionally visit field sites to support data collection or verify existing installations.

**Physical Requirements**

- Primarily office-based work involving extended periods of sitting or standing at a computer workstation.
- Manual dexterity to operate computer peripherals such as keyboard and mouse, and visual acuity to review detailed drawings and technical documents.
- Occasional lifting or carrying of light materials or documents (up to 20 lbs).
- Periodic visits to job sites may be required, involving walking on uneven terrain, climbing ladders or stairs, and adherence to safety protocols including wearing personal protective equipment (PPE).
- Exposure to varying weather conditions, noise, and typical construction or industrial site hazards during field visits.

*Nothing in this job description restricts management's right to assign or reassign duties and responsibilities to this job at any time.*