



**NOW HIRING
CAREERS AT AKA**

ELECTRICAL ENGINEER

Employment: Full Time | Reports To: Electrical Engineering Manager | Location: Poole's Corner

ABOUT THE ROLE

The Electrical Engineer is responsible for the design, development, analysis, testing, and implementation of electrical systems and equipment supporting marine and onshore power systems, control systems, and automation solutions. Electrical Engineers design, plan, research, evaluate, and test electrical and electronic equipment and systems including power generation and distribution systems, control systems, and electrical equipment used in industrial and marine environments.

The role involves preparing engineering specifications, performing system analysis, producing technical documentation, and supporting installation, testing, and commissioning activities. The Electrical Engineer applies professional engineering principles to ensure electrical systems are safe, reliable, compliant with regulatory standards, and aligned with project and operational requirements.

PRIMARY RESPONSIBILITIES ENGINEERING DESIGN AND DEVELOPMENT

- Design and develop electrical power systems, control systems, and automation systems for marine and onshore applications.
- Conduct electrical engineering analysis to support the design, operation, and performance of electrical systems and equipment.
- Conduct research into the feasibility, design, operation, and performance of electrical systems and equipment.
- Investigate electrical equipment failures and recommend corrective engineering solutions.
- Prepare engineering specifications, technical reports, and functional system descriptions.
- Supervise or coordinate the preparation of engineering drawings, specifications, and technical documentation.
- Evaluate and recommend improvements to existing electrical systems and equipment.
- Develop engineering documentation including electrical schematics, single-line diagrams, functional flow diagrams, and system architecture diagrams.

- Apply electrical engineering principles to ensure systems meet safety, performance, and regulatory requirements.
- Select electrical components, equipment, and materials suitable for marine and industrial environments.

MARINE AND ONSHORE ELECTRICAL SYSTEMS

- Support the design and integration of shipboard electrical systems and marine power distribution systems.
- Assist in the development and maintenance of onshore electrical infrastructure supporting marine operations.
- Analyze and evaluate electrical systems used in marine vessels, port infrastructure, and related facilities.
- Ensure electrical designs consider environmental conditions, reliability, and safety requirements typical of marine and industrial environments.

PROJECT AND CLIENT ENGAGEMENT

- Interface with customers and internal stakeholders to determine project scope, requirements, and deliverables.
- Provide engineering input during project planning and system design phases.

- Participate in technical meetings and design reviews with internal teams and clients.
- Translate operational and customer requirements into practical engineering solutions.

ENGINEERING DOCUMENTATION

- Produce and maintain engineering documentation including design specifications, system descriptions, test procedures, maintenance manuals, and troubleshooting guides.
- Maintain documentation in accordance with company document control procedures and quality management standards.

TESTING, COMMISSIONING AND FIELD SUPPORT

- Support or lead system testing, commissioning, and troubleshooting activities.
- Plan and conduct tests and evaluations of electrical equipment and systems.
- Analyze test data and prepare technical reports documenting system performance.
- Provide engineering oversight during installation, commissioning, and operational startup.



HEADQUARTERS
PO Box 577
23 Brook Street
Montague, PE
Canada C0A 1R0

LOCATIONS
Canada
North America – Houston, New Orleans
Asia – Singapore
Europe – France
Africa – Morocco

CAREERS INFO
www.aka-group.com/careers/career-search/
www.aka-group.com





**NOW HIRING
CAREERS AT AKA**

- Analyze system performance and identify technical improvements.
- Attend project sites, vessels, or operational facilities when required to support installation, testing, and commissioning.
- Provide technical support for operational issues related to electrical and automation systems.

TECHNICAL LEADERSHIP AND ENGINEERING OVERSIGHT

- Provide technical guidance to engineering technologists, technicians, and project staff.
- Review and approve electrical designs, specifications, and technical documentation where required.
- Ensure engineering work meets applicable professional engineering standards, regulatory requirements, and company engineering procedures.
- Support multidisciplinary engineering teams in the design, implementation, and integration of electrical systems.

COMPLIANCE STANDARDS

- Ensure electrical systems comply with applicable electrical codes, marine regulatory requirements, and safety regulations.
- Ensure compliance with applicable marine classification societies, electrical codes, and safety regulations.
- Support projects involving shipboard electrical distribution systems, propulsion support systems, and port or marine infrastructure.
- Contribute to the development and improvement of engineering standards, procedures, and technical guidelines.

KEY REQUIREMENTS

EDUCATION AND EXPERIENCE

- Degree in Engineering or a related engineering discipline from an accredited university.

- 3–8 years of relevant electrical engineering experience.
- Registered as a Professional Engineer (P.Eng.) or eligible for registration with a provincial engineering regulatory authority affiliated with Engineers Canada.
- Experience in the design, development, and implementation of electrical power systems, control systems, and automation systems.
- Experience working with marine power systems, shipboard electrical systems, or port infrastructure is considered an asset.

TECHNICAL COMPETENCIES

- Knowledge of electrical power generation, distribution, and control systems.
- Understanding of marine electrical systems and industrial power systems.
- Knowledge of power system protection, control systems, and electrical equipment specification.
- Familiarity with power system analysis, load calculations, and electrical system integration.
- Ability to develop electrical schematics, system diagrams, and engineering documentation.
- Ability to analyze complex engineering problems and develop effective engineering solutions.
- Knowledge of applicable electrical codes, safety standards, and regulatory requirements.

CORE COMPETENCIES

- Analytical Thinking - Ability to analyze complex electrical systems and develop practical engineering solutions.
- Problem Solving - Applies engineering principles to diagnose and resolve technical issues.
- Project Collaboration - Works effectively with multidisciplinary project teams.

- Organization - Manages multiple projects and priorities efficiently.
- Attention to Detail - Ensures accuracy in engineering design and documentation.
- Initiative - Demonstrates proactive problem solving and continuous improvement.

COMMUNICATION COMPETENCIES

- Communicate technical information clearly to clients, project teams, and management.
- Tailor communication style to diverse technical and non-technical audiences.
- Participate effectively in engineering reviews and project meetings.
- Translate operational needs into engineering solutions.

TECHNICAL SOFTWARE SKILLS

- Proficiency in Microsoft Office applications including Word, Excel, Outlook, and Access.
- Experience using electrical engineering design and analysis software such as AutoCAD Electrical, ETAP, MATLAB, or equivalent tools.

WORKING CONDITIONS

- Work may be performed in office, industrial, marine, or shipboard environments.
- Site visits may be required to support installation, commissioning, or troubleshooting activities.
- Occasional travel to project sites, ports, vessels, or operational facilities may be required.