Principal Controls Engineer

Job Description – October 2025

Department:	Engineering Controls	**Site:**	Lincoln
Reporting to:	Engineering Manager	**Key Reports:**	None

Role Summary

The Principal Engineer is responsible for leading and supporting all aspects of control system activities undertaken by Greenray, with particular emphasis on developing and delivering software engineering control solutions for retrofit and upgrade projects.

The Principal Engineer plays a key part in the design and development of gas turbine-specific software control system governors, temperature monitors, and sequencers, as well as in guiding other members of the Engineering Team in the delivery of modular software solutions.

This key role also involves direct customer interaction, site visits when required, and oversight of control system integration, testing, and commissioning, ensuring technical excellence and alignment with company standards.

Key Responsibilities and Tasks

All job holders need to demonstrate, understand and implement the company values within their roles.

Teamwork & Communication:

- Work closely with the General Manager, Controls, and cross-functional teams (Engineering, Projects, and QHSE) to ensure collaborative delivery of control system solutions.
- Provide technical leadership and guidance to Controls Engineers, supporting the development of modular software designs and mentoring team members.
- Represent the Controls Engineering function in design reviews, project discussions, and customer meetings.
- Support new business opportunities and occasional sales activities, including site surveys and technical presentations.
- Support the development and mentoring of other engineers, promoting knowledge sharing and technical excellence.

Safety & Sustainability:

- Ensure that all control system design, programming, and testing activities comply with health, safety, and environmental standards.
- Promote safe design practices in control systems, contributing to operational reliability and sustainability.
- Participate in FAT (Factory Acceptance Tests) and SAT (Site Acceptance Tests) to ensure system safety and compliance before handover.
- Encourage a proactive safety culture across engineering projects and during site commissioning activities.

Accountability:

- Lead the design, development, and testing of PLC-based control systems for gas turbine retrofit systems.
- Provide technical direction on detailed design, programming, and manufacturing activities related to control systems and associated equipment.
- Compile and review technical documentation, including design specifications, functional design specifications, flow charts, PLC code, and test documentation.
- Serve as the design review and approval authority for turbine software and hardware control solutions.
- Provide technical expertise and input into tenders, sales enquiries, and project bids.

Quality & Reliability:

- Ensure control system designs, software, and hardware meet industry quality standards.
- Evaluate suppliers and equipment to ensure suitability and compliance with project specifications.
- Support the creation of accurate P&ID/schematics through close collaboration with Engineering.
- Contribute to maintaining a knowledge base for modern control philosophies and continuous improvement of Greenray's technical offerings.
- Maintain an up-to-date knowledge base of PLC technologies and modern control system architectures relevant to gas turbines.

Excellence in Delivery:

- Drive on-time delivery of high-quality, cost-effective control system projects that meet customer expectations and company objectives.
- Provide technical support throughout installation, commissioning, and aftersales stages, ensuring reliable operation and customer satisfaction.
- Support the business development strategy by contributing to the evolution of Greenray's control system solutions and market offerings.
- Demonstrate a commitment to learning, innovation, and continuous professional development, ensuring Greenray remains a leader in turbine control systems.

Required Skills

Education (qualifications & training)

- Degree-level education in Electrical, Control, or Automation Engineering, or equivalent professional experience.
- 5+ years' experience in PLC-based control systems.
- Experience in software and hardware design for gas turbine control systems.
- Commissioning and installation experience (site and office environments).
- Offshore Safety Survival Certificate desirable.

Skills (capabilities & qualities)

- Demonstrated leadership experience with responsibility for managing cross-functional teams across site and office environments.
- Strong technical understanding; able to interpret engineering drawings and quality documentation.
- Exceptional communication skills — written, verbal, and interpersonal — with the ability to influence across all levels.
- Proficient in Microsoft Office (Excel, Word) and ERP/business systems.
- Demonstrates integrity, professionalism, and alignment to Greenray's values.