

SENIOR ELECTRICAL ENGINEER

Mitsubishi Power Aero LLC, Glastonbury, CT

About Mitsubishi Power Aero LLC

Mitsubishi Power Aero LLC is headquartered in Glastonbury, Connecticut, USA, and is a group company of Mitsubishi Power Americas, Inc. Mitsubishi Power Aero is the OEM and the exclusive provider of aero-derivative gas turbine packages based on the advanced technology of Pratt & Whitney® proven aircraft engines. For over 60 years, Mitsubishi Power Aero products and services have been the innovative solutions that our global customers require to deliver reliable, affordable electricity to their consumers.

Our customers rely on us to offer a true partnership for the entire life cycle of their gas turbines and to provide the best advice, monitoring, upgrades, retrofits, and repairs available to keep their operations running smoothly. We offer a rare level of customization, hands-on service, and responsiveness. Speed, flexibility, and durability are hallmarks of our products and customer support, as well as our culture.

Mitsubishi Power Aero has installed more than 2,000 gas turbines in over 50 countries. Our portfolio of aero-derivative gas turbine engines offers competitive, efficient, and flexible products that generate 30 to 140 MW of power in peaking, baseload, and on-demand power applications. As the demand for power expands, and more intermittent sources of power are introduced to power grids, Mitsubishi Power Aero will continue to play a vital role in providing energy security to customers worldwide.

We integrate resources and create synergies with other Mitsubishi Power companies, allowing us to deliver optimized technical and commercial solutions. Customers respect our rich heritage as an innovator and value our financial stability as part of Mitsubishi Heavy Industries Group, a global leader in energy. Mitsubishi Power Aero cultivates the full potential of employees to advance engagement, personal growth, and organizational goals. Connect with us at aero.power.mhi.com or [LinkedIn](#).

Job Summary

The **Senior Electrical Engineer** has deep technical expertise in power generation systems and OEM package design and will lead the expanding electrical team supporting our aftermarket service business. This role requires a highly experienced engineer who can take ownership of electrical design deliverables, troubleshooting, and upgrade solutions for gas turbine generator packages, control systems, and auxiliary equipment. The successful candidate will serve as a technical leader for Aftermarket projects, driving design modifications, retrofit solutions, and upgrade implementations for fielded equipment. Expertise with Woodward MicroNet™ control systems, Allen Bradley PLCs, AVR/excitation systems, and breaker control circuits (AC/DC) is essential.

Key Responsibilities

- Provide technical direction and guidance to engineers and designers supporting new product development and retrofit projects for the existing fleet of FT8 and FT4000 aero-derivative gas turbine units.
- Own and drive aftermarket engineering projects, including control system retrofits, panel upgrades, MCC modifications, and generator excitation enhancements.
- Serve as the primary technical interface for customer support, field service, and proposal teams on electrical matters.
- Evaluate legacy designs and propose modernization solutions that enhance reliability, safety, and maintainability.
- Support root-cause analysis and troubleshooting of field electrical and control issues.
- Develop and review complete drawing packages, including electrical single-line diagrams; breaker control (AC/DC) schematics and interlock logic; control panel and wiring diagrams; and I/O lists, cable schedules, and termination drawings.
- Design and specify control panels, MCCs, and field wiring systems for new and retrofit applications.

- Interface with and configure Woodward MicroNet, Allen Bradley, SIMATIC, and Vernova control systems.
- Integrate AVR systems, excitation equipment, and field instrumentation for turbine-generator control.
- Ensure all deliverables meet IEC, IEEE, NEC, and NFPA 70 requirements, along with customer specifications.
- Coordinate with controls, mechanical, and project management teams to ensure seamless integration of electrical and control systems.
- Participate in FATs, SATs, and commissioning to validate system operation and design compliance.
- Support proposal and estimation activities for Aftermarket bids and scope changes.
- Mentor junior engineers, promote best practices, and standardize engineering documentation processes.

Qualifications and Experience

- Bachelor's degree in electrical engineering (master's degree preferred)
- Minimum 12 years of relevant experience in power generation, OEM systems, or industrial electrical design
- Strong background with Woodward MicroNet, Allen Bradley, and other major PLC/DCS platforms
- Proven ability to read, interpret, and design breaker control (AC/DC) schematics and protection circuits
- Hands-on experience with AVR/excitation systems, gas turbine auxiliary controls, and field instrumentation
- Proficiency in AutoCAD Electrical, EPLAN, or similar CAD tools
- Experience with commissioning, FAT/SAT, and troubleshooting of power generation equipment
- Solid understanding of generator control logic, power distribution, and protective relaying principles
- Strong communication and leadership skills to coordinate across multidisciplinary teams and customers
- Experience with OEM aftermarket/service environments or control system retrofit projects favored
- Familiarity with SEL, Multilin, or ABB protection relays preferred
- Demonstrated ability to lead engineering documentation upgrades and continuous improvement initiatives desired

Additional Requirements

- Up to 25% domestic and international travel may be required
- Willingness to support business-critical support needs outside of standard working hours