



Senior Wind Turbine Electrical & Controls Engineer

About PivotGen:

PivotGen is a developer of wind and solar energy projects throughout the United States. With a focus on creative problem solving, PivotGen develops new energy generation projects and engineers solutions to repower and give new life to older projects. Our team shares a commitment to achieving a sustainable energy future and we are dedicated to maximizing economic impact and environmental benefit for our partners and the communities we work in.

Job Description

Reporting to the Director of Systems Engineering, this position will help ensure the reliability and performance of our operating wind farms, as well as assist in the repowering and repair of newly acquired or customer wind farms. This is a hands-on engineering role which will support the diagnostics and reliability assessment of key electrical components such as power converters, IGBTs, generators, and substations across our operating wind farm portfolio. In addition, working with the field to optimize operability, validate new and updated controls systems, and work proactively with electrical and controls suppliers.

This position will work on a cross-functional team with a centralized mindset on process, using data and experience. Consideration should be given to both the business and technical needs with the goal of maintaining a product that meets our requirements. The discipline that executes a robust process of design, creation, and optimization of systems, consisting of identification and quantification of system requirements, performance of design trade studies, selection and implementation of the best designs, and verification that the design is properly integrated and executed. Processes extend from concept to implementation to operation.

Roles and Responsibilities

- Electrical System Diagnostics and Failure Analysis: Analyze inspection reports, alarms, and system logs to identify and troubleshoot electrical faults in the wind turbine fleet.
- Transformer and Generator Systems: Contribute to diagnostics and reliability improvements of the turbine generator systems.
- Emergency Shutdown and Grid Events: Assist in reviewing turbine emergency stop procedures and analyze turbine – grid interaction during grid trips or anomalies.
- SCADA Data Interpretation: Use plant SCADA systems to correlate fault codes and system behavior with operational events and recommend maintenance responses.
- Controls Systems: Identify, evaluate, introduce, and manage engineering solutions for product control and control system technology needs and upgrades.
- Work cross functionally to understand, address and support resolution of systems level issues.



- Communicate with site teams to understand reliability concerns and address needs proactively
- Some travel to company wind farm assets or acquisition targets (<20%)

Required Qualifications & Desired Characteristics

The ideal candidate will have the following skills and experience:

- B.S. Degree (or equivalent) in Electrical Engineering
- 5+ years of experience in wind electrical and/or control systems in design or O&M of power plant equipment preferably on Wind Turbine based power plants/substations.
- Familiarity with:
 - Electrical power equipment (generators, transformers, breakers, power conversion equipment (exciters/inverters/converters).
 - IEEE codes, ratings, classifications & requirements (i.e. cables, transformers, etc).
 - Concepts of protection of electrical power equipment & Protective devices.
 - Substations – equipment, layouts, maintenance needs/routines.
 - Electrical safety requirements and safety equipment.
 - Wind turbine electrical systems, including their operation, maintenance, and common challenges.
 - Wind turbine and/or plant level controller systems
 - Low/Medium/High voltage electrical equipment and requirements
- Able to support development of procedures and best practices related to discipline. Able to mentor and educate less senior team members.
- Able to speak, read, and write proficiently in English
- Located in Greenville, SC or Chicago, IL

The Company is unable and has no obligation to sponsor or assume the sponsorship of any applicant's employment visa.

How to Apply:

If you are interested in this opportunity, please submit your cover letter and resume or CV to HR@pivotgen.com. We thank all applicants for their interest, however, only those selected for an interview will be contacted.