



Title: Controls Engineer **Reports to: Engineering Manager - Electrical and Controls**

Company and Position Description

Array Technologies, Inc. (Array) has been the world's leading solar tracking company for 30 years. We are experiencing explosive growth built on our best-in-class products and dynamic teams. Join us, a global leader in tracking technology and help us bring clean, reliable, and economic solar power to the world.

Are you passionate about clean technology? Do you have a need to organize things wherever you go? Do you find fulfillment in knowing you are standing behind a 100% tested, rock-solid product? Array is currently seeking a Controls Engineer to help us develop optimal control software and algorithms for our next general tracker control systems.

The Controls engineer will lead our efforts with respect to tracker control program updates, enhancements and overall improvements going forward, including next generation hardware and connectivity. This position includes working with all levels of management, engineering, purchasing, plants, and associates to ensure the changeover is completed and the savings are captured. This position is full-time and exempt.

Duties and Responsibilities

- Read and process engineering documents, including process design guidelines, Electrical Schematics, Communications Network Architecture and engineering best practices guides.
- Design, develop, document, test and debug applications software and systems that contain logical and mathematical solutions.
- Conduct multidisciplinary research and collaborates with equipment designers and/or hardware engineers in the planning, design, development, and utilization of electronic data processing systems for product and commercial software.
- Analyze system capabilities to resolve problems on program intent, output requirements, input data acquisition, programming techniques and controls.
- Work with Sales and customers to ensure that the requested product specifications are clearly documented
- Ensure that the electrical equipment is tested that it meets specifications and the needs of our customers.
- Ensure electrical products meet UL, NEC, and NIST standards; work with those agencies to obtain certifications.
- Provide customer phone support on the operation of the equipment and assist customers in debugging of equipment problems.
- Occasionally, travel to customer site to investigate problems or repair equipment with electrical and controls equipment including PLC, PC, and microcontroller-based controls.
- Work with field service technicians and customers to correct product issues and provide product improvements & enhancements
- Lead activities to optimize and drive the engineering process, developing operating strategies, plans or procedures.
- Support the sales and product management groups if required for particularly challenging customer requirements or field issues.
- Travel - Some travel required to vendors and construction sites to perform inspections and tests.
- Other tasks as may be assigned by Array management

Required Knowledge, Skills, and Abilities

- Minimum of 5-7+ years' experience developing Siemens based PLC, HMI and SCADA programs for Machine Control applications.
- Extensive knowledge of both hardware and software (PLCs and/or microcontrollers)
- In depth understanding on SCADA and MODBUS systems and related communication
- Experience with electrical power system design (inverters, cabling, protection...)
- Know how in application of design for reliability
- Versed in Stage Gate Product Development Processes
- Experience working in a matrixed environment, interfacing with high-level internal and external leadership
- Excellent communication and team building skills.
- Strong computer skills required include spreadsheets, presentations, 3D CAD and ERP.
- Ability to work on multiple projects concurrently a must.
- Must have good organizational and time-management skills.
- Communicate effectively with engineers, drafters, and others within the company as needed. Work well within a team.
- Experience in the solar industry a plus.
- Computer skills including Microsoft Word, Excel, PowerPoint, and SolidWorks.
- Ability to setup tests and run experiments quickly.
- Must be able to successfully pass a pre-employment drug test and background check.

Education and Experience

- BS degree in Electrical Engineering. Master's degree a plus.
- Hands-on PLC programming, with a minimum of 5 years relevant experience
- Ability to read and interpret schematics
- Knowledgeable in Ladder Logic & Relay Logic
- Must be able to troubleshoot and diagnose PLC's, Electrical & Mechanical systems
- Must know Servo & Stepper Motors, AC Drives