

Engineer, EMS SCADA

Location: Heathrow, FL / Hybrid / Remote

About Prevalon

Prevalon Energy LLC (Prevalon), a Mitsubishi Power Americas and EES joint venture, is a leading global energy storage technology and services company that is empowering companies to deploy flexible energy solutions and accelerate a more sustainable energy future.

With 10 years of global battery energy storage experience and over 4 GWh of utility-scale battery energy storage projects deployed, Prevalon develops an end-to-end integrated battery energy storage solution that delivers throughout the entire lifecycle of your project and ensures performance.

Working with our customers to develop a solution to meet the demands of their energy system today and into the future, we are grounded by the principles of commitment, reliability and expertise to guide our decision making, design philosophy, and relationship building.

Our Culture and Values

Responsibility

Safety is at the core of everything we do. From the well-being and health of people to the quality of the products we develop and implement, sustainability is the foundation of our operations. Our expertise guides our decision-making and design development, and lives at the core of our mission.

Community

People are the focus and heartbeat of what we do. We prioritize the well-being of our customers, employees, and communities we work with. Through teamwork, collaboration, and open communication, we work together to continuously innovate.

Innovation

We value and encourage creativity in the ways we work and are always forward thinking. We embrace diversity of thought and adapt to emerging trends and technologies. We recognize the importance of respecting traditions but not beholden by them.

Accountability

We are focused on taking responsibility and ownership for our actions and decisions. We deliver on promises in a transparent and reliable manner. We are accountable in our commitment to sustainable practices and products.

Job Summary

The EMS SCADA Engineer reports to the EMS Product Manager and will be responsible for configuring and programming the SCADA Platform for battery power plants integrated by Prevalon Energy. This individual will work closely with the SCADA developers and OT Network Administrators to achieve the deployment of production ready plant OT networks. This position will specifically deploy data acquisition systems & networks for utility scale energy storage solutions with direct integration to LFP DC Blocks batteries, inverters, and balance of plant equipment required to provide supervisory and control for a battery power plant. The EMS SCADA Engineer will also support the EMS Controls Engineer and Commissioning Lead in constructing an HMI that can streamline deployments of new projects.

Essential Duties & Responsibilities

Essential duties and responsibilities include, but are not limited to, the following:

- Deploy Ignition gateways and construct various gateway network architectures that fit the needs of each BPP project being executed.
- Create local historians for capture of plant data and assist in product DB maintenance.
- Develop and implement modbus data maps, HMI configurations, and other development tasks required for the ongoing development of SCADA within the EMS platform.
- Lead plant network deployment and commissioning of all IEDs within the Battery Power Plant, ensuring all have stable network connectivity.
- Configure and conduct Site Acceptance Testing to ensure all IEDs are connected to the data acquisition system and tag validity is 100% good quality.

Knowledge, Skills, & Responsibilities

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Gain familiarity with the network and virtualized products used in the creation of the EMS SCADA System.
- Deploying centralized or de-centralized SCADA systems, utilizing Induction Automation's Ignition platform.
- Develop UDT tag templates and OPC-UA tag namespaces on a project basis

- Develop and deploy Ignition gateway configuration instances within site EMS racks and establish remote data exports using MQTT to Prevalon's Azure Cloud environment.
- Assist in configuring Hypervisors with VMWare products such as Vsphere and Vcenter.
- Configuration of controllers, IEDs, VMs, and network devices before FAT & SATs.
- Lead proactive team efforts to achieve departmental and company goals.
- Protect confidential information by not communicating, disclosing to, or using for benefit of 3rd parties.
- Comply with all EHS policies, practices and procedures reporting all unsafe activities to Management and/or Human Resources.
- Work in the global environment to maintain standards and latest practices.
- Coordinate directly with the SCADA Developers in testing new features and designs deployed withing the EMS before it is deployed to the production sites.
- Reasoning Ability
 - Able to define problems, collect data, establish facts, and draw valid conclusions. Able to interpret an extensive variety of technical instructions, read and understand network, mechanical and electrical drawings.
- General Technical Skills
 - **Software Development:** Python, Java, C# languages.
 - **Operating Systems:** Ubuntu/Linux or Windows Server 2022.
 - **Virtualization:** VMWare (Vsphere, Vcenter), Windows Hyper-V.
 - **Cloud:** Azure Injector, IOTHUB, Azure Data Explorer, Azure Data Lake.
 - **Vision Control Tools:** GIT, GITHUB, Bitbucket, SVN, Azure Repos.

Education & Experience

- Bachelor's degree in: Electrical Engineering, Computer Engineering, or Computer Science with a minimum of three (3) years of related experience in industry.
- Expert in TCP/IP networks along with software application configuration is a must.
- Essential to have worked on deploying centralized SCADA system in the past.
- Specific Work Experience

- **Code Development:** With heavy use of Python, Java, C#, Windows Batch, Power Shell, Bash, implementing code to be used in specific tasks.
- **Controls Logic:** IEC 61131-3 ST, SFC, or another equivalent controls language.
- **Automation Controllers:** RTAC, EPIC Groov, Hitachi RTU540, Siemens Simatic, Schnieder M262, or Moxa ioThinx4530.
- **SCADA Protocols:** TCP/MODBUS, RTU/MODBUS, DNP 3.0, OPC-UA, MQTT / MQTT Sparkplug-B, SEL FMB, C37.118 PMU, IEC 61850 variants, P2P.

Physical Requirements & Work Environment

The physical demands and work environment characteristics described herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Expect 40% travel, most project sites across North and South America; and sometimes to Prevalon Energy's HQ in Lake Mary, Florida.
- Regularly required to stand and walk.
- Frequently lift and/or move up to 25 pounds.
- Occasionally lift and/or move up to 50 pounds.
- The noise level in the work environment is usually moderate to loud. Hearing protection may be recommended and/or required in some work locations.