

Job Title	Principal Systems Architect
Location	California, US
Team	Solutions Engineering

Job Purpose

This is a central role ensuring that projects incorporating Invinity's Vanadium Flow Batteries (VFBs) meet customer requirements. You will work with customer project engineering teams and international EPCs on the design and implementation of projects using Invinity VFBs, responding to customers' technical specifications and regulatory standards. You will work with a team of mechanical, electrical and software engineers based in Canada and the UK and deal with all aspects of grid-connected energy storage systems.

Responsibilities

- Provide direct technical interface with customers to ensure that system design requirements for the project are appropriate and feasible.
- Set standards for, support the development of, and review the core system specification documents and drawings for each project.
- Create and communicate to customer/partners a clear set of system definitions and design specifications for the successful deployment of VFB systems.
- Influence and support the selection of critical equipment such as inverters and transformers, working with international suppliers of power electronics systems.
- Review project specifications and collaborate with the technical management of international EPCs to define the system solutions for VFB deployment overseas.
- Provide technical leadership to the team of systems engineers assigned to the Project:
 - Lead the creation of detailed system design templates, including site layout, foundation requirements, power distribution systems, control and monitoring network, and safety system.
 - Work with the customers and EPCs to produce SLDs, site layouts, network diagrams and interconnection electrical schematics for large VFB plants.
 - Direct, support and guide the team on a day-to-day basis ensuring they have clarity and successfully achieve the systems technical requirements.
 - Collaborate positively and effectively with Commercial, Technology, Product Development, and Operations teams across the business to deliver customer projects within cost and schedule targets for the project.
- Assure regular interface with the customers' technical and project management teams, understanding customer requirements and addressing any technical and project management issues, proposing innovative and practical solutions for the delivery of the power and storage system.
- Review and input to the approvals of System Architecture basis of design prior to sign-off from the VP Solutions Engineering and release.
- Adopt and maintain an overriding culture of safety, pursue pro-active safety initiatives and work with the project, manufacturing, and software teams to implement.
- Ensure that documentation is a critical deliverable for all actions with all designs and specifications peer reviewed. Oversee the sharing and storing of documentation through use of a PDM system.

- Champion and facilitate improvement initiatives to reduce the cost of our next generation products, including supporting the cross functional teams involved.
- The role may require occasional travel (US/Canada and International).
- Perform other duties and responsibilities as required.

Qualifications and Experience

- High calibre Systems Engineer with proven power systems expertise, you will have 15 years of hands-on engineering experience delivering large electromechanical systems in a relevant industry
- An undergraduate or master's degree in a relevant Engineering discipline is required
- Solid practical experience in system engineering, design and implementation of power generation, storage or distribution systems
- Experience of microgrid and grid connected renewable generation system design, grid connections, inverters and transformers, cable sizing and site cable layouts
- Openness to embrace multiple perspectives and provide constructive challenge. Strong, positive influencing skills, using enquiry to identify various external and internal customer requirements informing design decisions, work planning and prioritising across the teams
- Comfortable identifying problems, root causes, risks and opportunities. Logical mind set, analytic, rational, and decisive decision maker. Ability to justify decisions and an assertive and persuasive communicator
- Strong organisational and planning skills, together with a sound understanding of the value strict processes bring are essential
- Customer and delivery focused; ability to work under pressure and to tight deadlines; action-oriented, entrepreneurial, and innovative approach to technical management
- Right to work in the US

Desirable

- Good understanding of control systems, PLC or industrial PC based.
- Knowledge of CE and/or UL certification for energy generation and storage equipment.