

Lead Battery Systems Engineer

Location: Arlington VA

About Fluence

Fluence, a Siemens and AES company, is the leading global energy storage technology solutions and services company that combines the agility of a fast-growing technology company with the expertise, vision, and financial backing of two industry powerhouses. Building on the pioneering work of AES Energy Storage and Siemens energy storage, Fluence's goal is to create a more sustainable future by transforming the way we power our world. The company offers proven energy storage technology solutions designed to address the diverse needs and challenges of customers in a rapidly transforming energy landscape, providing design, delivery and integration in over 160 countries. Fluence works closely with customers throughout their journey and provides advisory, financing, and project lifecycle services.

Job Description

This role will support Fluence product development by serving as the CTO group's engineering lead on lithium ion battery subsystem hardware, performance, and testing. A general understanding and ability to learn about battery chemistry is necessary but the role will be focused on the electrical engineering aspects of battery systems.

Responsibilities include:

- Acquire in-depth knowledge of the battery subsystem components (typically battery modules and BMS) used in Fluence's current and future energy storage products; maintain detailed library of battery equipment technical characteristics
- Maintain and update Fluence technical specifications used in supply contracts for procurement of battery subsystem equipment from major international battery suppliers
- Perform lab testing of new battery equipment planned for use, such as protection tests, BMS communication testing, integration testing with Fluence control software, access to necessary monitoring data points, mechanical fit and ease of installation, and other evaluations
- Collaborate with system engineering team to determine how battery system technical characteristics should influence overall energy storage system design.

- Collect data from battery suppliers on projected battery degradation for various usage patterns; operate degradation models provided by battery suppliers.
- Collect data from battery suppliers on thermal behavior of battery modules during operation and collaborate with system enclosure design team to adapt cooling system sizing for major application types.
- Maintain close technical contact with battery system suppliers to stay up to date on future product road maps and encourage features that are preferred for incorporation into future Fluence products

Qualifications

The preferred candidate will have a background in electrical or systems engineering with a minimum of an undergraduate degree and 3-10 years' experience. Salary is commensurate with experience. Experience in the energy storage or backup power is preferred.

Required:

- Experience with designing, specifying, or testing battery equipment, battery-based backup power systems, or DC/DC or DC/AC power conversion equipment
- Strong proficiency with electrical circuit calculations
- Hands-on experience with power systems equipment either in a lab environment or through field deployment for commercial projects
- Takes individual initiative and works with minimal supervision while being a collaborative team player.
- Possesses an entrepreneurial drive for getting things done and a “whatever it takes” attitude.
- Has excellent English verbal and writing skills, additional languages or international work experience is a plus
- 20-30%, willingness and ability to travel is required; travel to Los Angeles, CA expected once every 4-6 weeks, with some international travel.

Preferred:

- Experience with writing technical specifications for equipment procurement
- Familiarity with BMS communication protocols, i.e. ModbusTCP, CANbus
- Familiarity with the operating principles of battery management systems (BMS), such as cell balancing and protection functions
- Familiarity with energy storage product safety standards such as UL1973, UL9540, or UL1741

- Familiarity with fire protection standards involving lithium ion batteries is not expected but is a plus

Qualified candidates are requested to submit a resume and cover letter at

careers@fluenceenergy.com or

<http://nssrpo.catsone.com/careers/index.php?m=portal&a=details&jobOrderID=10813453>

Fluence **IS AN EQUAL OPPORTUNITY EMPLOYER** and fully subscribes to the principles of Equal Employment Opportunity, to ensure that all applicants and employees are considered for hire, promotion, and job status without regard to race, color, religion, sex, national origin, age, disability, sexual orientation, marital or familial status.