

Energy Systems Test Engineer, Solar & Storage

Location: Long Beach, CA

About Fluence

Fluence, a Siemens and AES company, is the global market leader in energy storage technology solutions and services, combining the agility of a technology company with the expertise, vision and financial backing of two well-established and respected industry giants. Building on the pioneering work of AES Energy Storage and Siemens energy storage, our goal is to create a more sustainable future by transforming the way we power our world. Providing design, delivery and integration, Fluence offers proven energy storage technology solutions that address the diverse needs and challenges of customers in a rapidly transforming energy landscape.

Fluence currently has more than 2.4 gigawatts of projects in operation or awarded across 24 countries and territories worldwide. We topped the Navigant Research utility-scale energy storage leaderboard in 2018 and were named one of Fast Company's Most Innovative Companies in 2019. In 2020, our sixth-generation Tech Stack won Commercial Technology of the Year at the 22nd annual S&P Global Platts Global Energy Awards.

Leading

Do others come to you for your subject matter expertise? Are you excited by the challenge of working in a start-up atmosphere with a purpose?

Fluence is looking for a power electronics and energy storage system (ESS) test engineer with experience planning and conducting test activities to validate performance of utility-scale solar and storage power plant inverters, DC/DC converters, plant controls, battery systems, and associated components. The role will be responsible for working with equipment suppliers and Fluence R&D staff to adequately design and implement test beds and document results of test. A strong understanding of hybrid solar and storage power plant equipment operations and controls is required.

Responsible

Fluence is defined by its unwavering commitment to safety, quality, and integrity. We take personal ownership in what we do, developing trust in our relationships with internal and external stakeholders. We firmly believe in having honest, forthcoming, and fair communications.

This role will be directly involved in the product development engineering of utility scale energy storage solutions, including:

- Plan and document standardized and novel test procedures
- Design and construct test setups at megawatt scale
- Conduct hands-on testing of functionality and interoperation of solar + storage system components (inverters, DC/DC converters, plant controls, battery systems, solar PV modules and balance of plant hardware) and integrated commercial and prototype systems
- Review inverter technical documentation to determine compliance with requirements and evaluate technical characteristics
- Develop deep understanding of inverter operations and provide guidance to the software team on inverter control and integration into the Fluence Operating System
- Collaborate with major power converter system suppliers on modifications or improvements to their products to ensure optimal integration with Fluence system design
- Analyze and report on test data
- Write technical application notes for use of test results in design, commissioning, and operations of solar + storage power plants

Agile

Here at Fluence, we strive to continuously improve, be intellectually curious and be adaptive to our customers and employee's needs. Collaboration is key, both in our partnerships with our customers, and with each other. Fluence prioritizes the most critical efforts that allow for the greatest impact.

The preferred candidate will have a background in electrical engineering, power systems, or controls systems and product development in the power conversion and/or renewables space, qualified electrical worker training, a minimum of an undergraduate degree and 4-10 years of work experience. Salary is commensurate with experience. Experience with solar and/or energy storage is strongly preferred.

Required:

- Electrical engineering, controls engineering, and/or product development experience with energy storage, PV systems, microgrids, or other integrated DC/AC electrical systems
- Familiarity with DC/AC or DC/DC converter operation; some experience designing, or modeling power conversion devices is a plus
- Knowledge of utility grid interconnection standards, such as UL/IEEE standards, USA local grid codes, or European grid codes
- Familiarity with NEC and NESC design and construction practices
- Experience with NFPA 70E training and recommended practices
- Has excellent English verbal and writing skills, additional languages or international work experience is a plus.
- Willing and able to travel, domestically and internationally, approximately 20% of the time

Preferred:

Familiarity with utility scale systems design, control, and monitoring

Familiarity with communication protocols such as ModbusTCP, CANbus, or DNP3

Proficiency in computer programming, ideally in at least one of the following languages:

Python

Ruby

Matlab

Simulink

Java

C

Familiarity with the Linux command line interface and operations

Familiarity with TCP/IP and Ethernet network architecture/engineering

Hands on experience testing power converter equipment in a lab environment

Knowledge of or history working with major component suppliers in the solar or battery storage industry, such as inverters, PV panels, or lithium ion battery modules

Experience qualifying products to product standards with NRTLs (i.e. UL, Intertek, CSA)

Familiarity with Agile process

Familiarity with Testrail or similar tools

Fun

Working on transforming a fundamental part of our society is exciting and fulfilling. It requires creativity, diversity of ideas and backgrounds, and building trust to effect change and move with speed. We respect our coworkers and customers. We listen to what others have to say, and we are inclusive.

Get in touch

Apply [Here](#)

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, veteran status, sexual orientation, marital or familial status.