

Power Systems Engineer

Location: (home office, flexible) or Erlangen, Germany

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 Systems Engineer with experience in simulation of electrical power systems and modelling of network components including power electronics. This position is within the Technology Team and will focus on power systems modeling of Fluence Battery Energy Storage Systems (BESS), particularly the major components of the inverters and the Fluence control system.

Your responsibilities will include:

- Provide expertise in the area of understanding of interaction between the BESS power converter systems (PCS) and the utility/grid under a broad range of system events and operating conditions.
- Modelling of BESS in detail with power electronics converters including controls and protection and analysis to include steady state as well as transient analysis

- Development of power plant models of Fluence's control systems to demonstrate functional and dynamic performance to meet grid code requirements
- Simulate and evaluate grid behaviour of the connected BESS using power systems analysis software with emphasis on full system integration, control and model validation
- Actively work and provide support to both internal customers; sales, engineering, business development teams and external customers such as ISOs, energy producers and utilities in the use of Fluence BESS models

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.

- Master's Degree in electrical engineering with an emphasis on power systems and/or renewable energy systems and 2-5 years of work experience
- Experienced in simulating and evaluating power converter systems with knowledge of power system issues (e.g. FRT behaviour) and interaction between power electronics and power system equipment, grid code requirements
- Proficient in power system analysis and control simulation tools (e.g., PSS®E, PowerFactory, PSCAD/EMTDC, MATLAB® Simulink®, PSLF)
- Experienced in user written dynamic models for PSS®E or PSCAD and/or DSL scripting in PowerFactory
- Strong programming skills in Python, Fortran, C++ etc.
- Knowledge of utility grid interconnection standards, such as UL/IEEE standards, North American ISO/RTO requirements, European grid codes
- Knowledge of islanded "grid-forming" operation of inverters is a plus

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.

- Ability to work collaboratively in remote teams, teamwork

- Fluency in English; knowledge of German is a plus
- Excellent communication and presentation skills
- Innovative and creative problem-solving skills
- Self-motivated and willing to take initiative, customer orientation

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

Please send your resume and cover letter to careersgermany@fluenceenergy.com.

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.