

Spirae's integrated approach yields a flexible and highly scalable infrastructure that is ideal for continually adding renewable and distributed sources, enabling new services and optimizing network operations.

Company

Based in Fort Collins, Colorado and privately held since 2002, Spirae is a recognized solutions provider and thought leader in distributed power and control systems. Spirae uses pioneering active distribution management techniques to integrate high levels of renewable and distributed energy resources, and specializes in the development of local and wide area controls, power system simulations, and energy service platforms.

Wave® Heritage

Spirae's Wave® platform is central to these solutions. Wave® is a state-of-the-art Active Distribution Management technology platform that optimizes grid performance by reliably orchestrating distributed energy resource operations with grid operations.

Wave® was developed and refined through strategic project activities in the US and Europe over the past eight years, including projects such as FortZED (Fort Collins Zero Energy District), partially funded by the US Department of Energy through its RDSI program (this project was ranked #3 in a

CIGRÉ paper entitled "Development and Operation of Distribution Networks" ranking advanced Active Distribution Networks in the world in Dec. 2010), and the Energinet.dk (Transmission Service Operator, Denmark) for the Cell Controller Pilot Project (ranked #22 in the same CIGRÉ study).



Team

Spirae's team combines a deep understanding of the challenges and opportunities facing the rapidly changing electric power industry to provide a flexible and collaborative approach to solution design for each project. With world-class talent in control design, modeling, power engineering, software development, and field engineering, Spirae brings cross-disciplinary expertise and disciplined project management to every customer engagement.

This combination of depth and diversity enables Spirae to not only develop best-in-class products but also to provide customers with tailored solutions to meet their unique needs. Spirae's portfolio of many patent-pending technologies in addition to a collaborative solution development process and delivery approach ensures that customers receive high value for their investment.

InteGrid Test and Development Laboratory

In addition to the deployment of Wave® Spirae offers grid scenario simulation services through the InteGrid Test and Development Laboratory, one of the most advanced and largest grid simulation laboratories in the world. The InteGrid Lab gives clients a unique facility to model, test and validate new technologies and solutions prior to field deployment. Simulations conducted in the InteGrid Lab provide valuable information for clients to determine appropriate technologies and controls solutions for reliably solving the problems they face. Customers are able to utilize physical assets, instrumentation, controls equipment, and a trained technical staff set up studies and run experiments. For example, the physical characteristics of a new storage device, photovoltaic array, user-load, or

inverter can be measured, tested and fully understood in a lab setting before system integration. The devices can then be interconnected across a distribution network to emulate the behavior of novel grid management solutions. Spirae also offers expertise in the design of customized experiments, analysis of simulations and report writing prior to field deployment and system commissioning.



Center for Smart Grid Advancement

Spirae leads the Center for Smart Grid Advancement (CSGA), a collaborative initiative providing a forum for thought leadership and subject matter experts to address the rapid transformation of the power industry. With its educational partners, CSGA recently launched the Smart Grid Technical Certification Smart Grid Professional Training in collaboration with Front Range Community College and Colorado State University. Through these initiatives, Spirae and its partners are able to engage a broad spectrum of stakeholders to spur innovation and knowledge sharing across the industry.

Please contact us for more information.

North America
sales@spirae.com
+1 970.449.8522
www.spirae.com