

Georgia Tech Receives \$2.1 Million in Federal Funding to Advance Grid Modernization

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Georgia Tech has been selected by the U.S. Department of Energy as one of four organizations to receive nearly \$2.1 million in funding for a groundbreaking grid-enhancing technology (GET) project. This collaborative effort aims to optimize the electric grids of Georgia and Alabama by integrating advanced power flow control (APFC) technology.

The project, a collaboration between Georgia Tech's Center for Distributed Energy, Southern Company, and Smart Wires, will leverage Smart Wires' innovative technology to enhance grid efficiency and reliability. Smart Wires' technology, including its Dynamic Line Rating software (SUMO) and mobile deployment valve technology (SmartValve), enables more efficient power flow by identifying and addressing bottlenecks on the grid.

SUMO allows the grid to dynamically assess and adjust power flow based on real-time weather and grid conditions, while SmartValve helps to offload strained power lines and optimize energy distribution. This integrated approach will significantly enhance the grid's ability to accommodate the increasing integration of renewable energy sources, such as solar power, which is rapidly expanding in the Southern region.

"This project represents a significant step forward in advancing more efficient and reliable grid operations," said Tim Lieuwen, interim executive vice president for research at Georgia Tech. "By optimizing power flow and facilitating the seamless integration of renewable energy, we can create a more sustainable and resilient energy future for our communities."

This project is expected to be completed by 2025 and will provide valuable insights into the successful deployment and operation of advanced grid technologies. By demonstrating the effectiveness of APFC

technologies, this project will pave the way for wider adoption of these solutions across the United States, leading to a more efficient, reliable, and sustainable energy grid.