



Testing Services

■ *What Can We Test?*

- Electrochemical systems
- (Lithium-ion, flow, supercapacitors)
- Electromechanical systems
- Thermal systems

■ *What Tests Do We Perform?*

- Use case testing (Peak shaving, PV smoothing, etc.)
- Performance characterization
- (Autonomous) functional testing
- Integration testing
- Performance degradation

■ *What Scales of Systems Do We Test?*

- Systems up to 1MW power
- Grid connected (front of meter and behind the meter)
- Solar and renewable integration
- Microgrid and islanding
- Remote and virtual testing

■ *What Do We Produce?*

- Customized test plans
- Independent reports for control tests, product development, proof of concept, etc.





Advisory Services

■ *Grid Modeling and Analytics*

- Value stream analysis and economic modeling
- Location optimization
- Capacity optimization
- Production costs estimation
- Planning and forecasting

■ *Algorithm Testing and Development*

- BMS algorithm testing
- Site controller algorithm testing
- Forecasting

■ *Remote Energy Storage System Testing Including:*

- Commissioning tests
- Energy storage warranty tests
- Performance tests
- Test plans

■ *Hardware/Software Solutions*

- Data controller
- Site controller
- Data warehouse
- Hardware to cloud

ABOUT SOUTHERN RESEARCH

Founded in 1941 in Birmingham, Alabama, Southern Research is a scientific and engineering research organization that conducts preclinical drug discovery and development, advanced engineering research in materials and systems development, and energy and environmental technologies research. SR supports clients and partners in the pharmaceutical, biotechnology, defense, aerospace, environmental, and energy industries.

We pursue entrepreneurial and collaborative initiatives to develop and maintain a pipeline of intellectual property and innovative technologies that contribute to the growth of the organization and positively impact real world problems.