SERVICES AND ENGINEERING SOLUTIONS



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YOUR RELIABILITY AND RESILIENCE PARTNER



The electric grid is getting more complicated, and power products are becoming more sophisticated to address customer needs. They are also increasingly interconnected, which introduces vulnerabilities to the grid. Selecting the right products, configuring and installing them correctly and securely, and getting maximum benefit over their life cycle can be a challenge when working with multiple suppliers.

Utility and commercial and industrial customers often face this challenge when executing complex power system projects because most suppliers only provide a piece of the solution. Indeed, from analysis and design engineering and cybersecurity to commissioning and maintenance, managing these moving parts can be costly and overwhelming.

S&C Electric Company has more than 100 years of experience in providing a total solution approach to all areas of power delivery. S&C offers a single source of comprehensive services for your distribution, transmission, and generation interconnection needs.

S&C POWER SYSTEM APPLICATIONS

S&C provides equipment, solutions, and services for the power grid distribution and transmission network. Whether a new installation or a grid enhancement project, S&C has a solution for you.

APPLICATIONS

- Microgrids and non-wires alternatives
- Smart grids
- Substations
- Renewables
- Automation
- Cybersecurity

SEGMENTS

- Utilities
- Municipal and cooperative systems
- Grid operations
- Government facilities
- Education facilities
- Data centers
- Commercial and industrial customers



GRID SOLUTIONS

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- Network assessment and solutions
- Project options and feasibility
- Design services
- Interconnection solutions

RAPID RELIABILITY

- Customized reliability improvement plan
- Optimized process and project management
- Programming and installation support

GRID-READY INVENTORY PROGRAM

- Managed inventory of grid-ready, programmed devices
- Spare parts

DESIGN AND APPLICATION ENGINEERING

S&C offers a variety of analytical studies and engineering design services for utilities, transmission operators, governments, and commercial and industrial customers. Ranging from system planning and reliability studies to switching and protection designs, S&C's engineering experts support grid reliability and resilience through all phases of a project life cycle.

ENGINEERING DESIGN SERVICES

- Preliminary designs
- Detailed designs
- Single-line drawings
- Wiring schematics (ac and dc)
- Grounding design
- Lightning protection
- Wiring diagrams
- Control room design
- Physical layouts, sections, and details
- Bills of material
- Protection and control design and logic diagrams
- Bus arrangements and layout drawings
- Relay panel layout
- SCADA engineering

APPLICATION ENGINEERING

- Automation control settings development
- IntelliTeam[®] Automatic Restoration System settings development
- IntelliTeam system testing
- Network design and configuration

CYBER SECURITY SERVICES

- Cybersecurity assessments
- Enhancement and improvement reports
- Federal risk-management framework assessments
- Secure network design and configuration

CONSULTING AND ANALYTICAL STUDIE

S&C's engineering professionals draw on vast industry experience to assist utilities, grid operators, developers, and commercial and industrial customers in evaluating system needs, reliability improvements, resource additions, and performance enhancements. These professionals are ready to share their expertise with you.

ANALYTICAL STUDIES

- Overcurrent protective-device coordination studies
- Short-circuit studies
- Arc-flash studies
- Power-quality studies
- Reliability studies
- Switching-transient studies
- Voltage-stability analysis and model development
- Harmonic studies
- Filter-design studies
- Insulation-coordination studies

CONSULTING SERVICES

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- Project-feasibility studies
- Equipment-selection assistance
- Technical application assistance
- Reliability-improvement studies
- Distributed energy resource (DER) and renewable integration studies
- Project-management services

MICROGRID STUDIES

- Initial evaluation and concept reviews
- Feasibility studies
- Business-case development
- DER options
- Available incentive and grant review
- Preliminary engineering design
- Detailed engineering design

FIELD AND SUPPORT SERVICES

S&C's field service technicians and factory-support personnel offer peace of mind to customers. Knowing their S&C equipment will be installed and maintained properly, customers benefit from these life-cycle services, which maximize the return and performance of their switching and control assets.

FIELD SERVICES

- Installation support
- Commissioning and testing
- Maintenance
- Upgrades and retrofits
- Replacement and spare parts
- Troubleshooting
- Factory testing

GLOBAL SUPPORT AND MONITORING CENTER

- 24/7 support center
- Remote asset monitoring and support
- Access to technical experts

S&C ELECTRIC COMPANY Excellence Through Innovation

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CUSTOMER TRAINING AND WORKSHOPS

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- Product training
- Product-application workshops
- Relay and programming training

