



→ **SEL Engineering Services**

Your Partner for Wide-Area Protection and Control Solutions

SEL Engineering Services offers complete, custom-engineered solutions for mitigating power system disturbances and preventing widespread outages. Our experts leverage field-proven SEL technologies and decades of industry experience to deliver solutions of all scales, ranging from microgrid control systems to nation-wide remedial action schemes.

Our wide-area protection and control solutions are designed to enhance situational awareness and provide advanced power management capabilities—allowing utilities to analyze unstable conditions, adapt the grid instantaneously, and minimize the impact on customers.

Partner with us today to engineer the ideal solution for your power system.

SEL SCHWEITZER ENGINEERING LABORATORIES

SEL Engineering Services

esinfo@selinc.com

selinc.com



Power Management and Control Systems

SEL POWERMAX® solutions are intelligent, fully integrated systems composed of relays, automation controllers, and specialized control algorithms. These solutions continuously monitor and regulate system dynamics to maintain grid stability, protect critical assets, and improve energy efficiency.

POWERMAX solutions are ideal for applications such as remedial action schemes, microgrid control systems, and industrial power management systems. They offer high-speed, automatic load shedding, generation control, and reactive power management as well as seamless islanding and synchronization systems.

NERC PRC Compliance Services

SEL Engineering Services offers a variety of services to help you achieve and maintain compliance with NERC PRC standards. Our specialists conduct comprehensive compliance assessments, including evaluations of existing protection and control designs, relay settings, and operational practices.

Based on the assessment, our teams can provide corrective action plans, compliance road maps, and audit-ready documentation. We also offer maintenance plans, compliance training, and solutions for streamlining data collection and analysis.

Wide-Area Monitoring Systems

SEL wide-area monitoring systems, or wide-area situational awareness systems, use synchrophasor technology, high-speed communications networks, and advanced data analytics to give you greater visibility into the fast-changing dynamics of your power system.

Integrated synchrophasor technology allows SEL relays to stream time-synchronized power system measurements at a rate of 30 to 60 messages per second—considerably faster than traditional SCADA measurements. This high-resolution data is seamlessly integrated with other critical data, such as event reports, fault locations, and weather dynamics, to improve overall situational awareness.

System Modeling and Studies

SEL Engineering Services can perform extensive simulations and studies using our Real-Time Digital Simulator (RTDS) facility and library of validated software models. These studies allow us to analyze your existing system, assess the feasibility of potential solutions, and optimize those solutions prior to commissioning.

Our RTDS facility also supports hardware-in-the-loop (HIL) testing, in which we integrate your actual SEL devices with a model of your power system. We invite you to participate live during this testing, as we run your complete solution through hundreds of real-world scenarios to verify its performance.