

Smart Grid Labs

EnerNex's

Smart Grid Labs

(SGL) is the premier

Smart Grid concept

design, test and

evaluation facility.

SGL provides our clients multi-faceted assessment services for communications, security, standards compliance, technology/vendor maturity, and implementation assistance across many Smart Grid domains. We offer vendors, utilities and regulatory elements a place to evaluate and understand technology readiness for Smart Grid in ongoing and emerging technology efforts.

We staff experts in each of the key Smart Grid technology domains, their device markets, and components offering, ready to bring best practice in design, test and evaluation to bear on your project. SGL has committed to innovation and ongoing investment in its test infrastructure. EnerNex maintains strategic mutual relationships with other Smart Grid testing facilities, some located at vendor and client sites, across North America, positioning us to deliver solutions to your problem.

We provide our clients outstanding, reliable technology services. Let us help you design and implement a Smart Grid technology evaluation strategy, process, and specific product requirements based on testable fact rather than assumption. Let us mitigate your risk of immature and non-interoperable technology adoption.

- We evaluate Smart Grid technology, products, performance, and vendors.
- We test equipment for compatibility with specific standards.
- We will help you develop a Smart Grid technology plan.
- We offer device / hardware penetration testing.
- We have a crystal ball for the future of Smart Grid technology.
- We use the best experts, fixtures, and methodologies available to the client.

EnerNex Experts

Building on expertise provided by EnerNex's core team, the Smart Grid Labs has selected the elite of scientists, technologists, engineers, and technicians on staff to translate the diverse set of Smart Grid domains into test operations.

Smart Grid Labs personnel participate and have leadership roles in most major Smart Grid related organizations and related standards bodies. These include the working groups and task forces of the UCA International Users Group, IEC TC 57, the IEEE Power and Energy Society, the IETF, and many more. Most SGL staff involved have helped develop or influence core smart grid standards development.

Why the Need for Smart Grid Labs

Understand what interoperability means for your specific technologies

Minimize the potential for technology obsolescence and stranded assets

Verify vendor claims

Understand which emerging technical requirements are the right ones

Ensure that the technology you choose is secure and meets relevant standards

Peace of mind

See your Smart Grid concept or technology in action sooner rather than later

Contact Us

620 Mabry Hood Road, Suite 101 Knoxville, TN 37932 865.218.4600

www.**smartgridlabs**.com
Follow us on Twitter,

www.twitter.com/enernex

Testing and Evaluation Services Include:



Pre-Conformance/ Pre-Certification Testing

Perform 'pre-conformance' and 'pre-certification' testing/evaluation (including review of firmware/apps) and recommendations for improvements

Interoperability testing for vendors and utilities between all products

Evaluation services to utilities for RFPs

UCAlug testing guidelines



Communications

Evaluations/assessments

HAN interoperability testing

61850/DNP testing

Wireless and low voltage PLC testing

Specialized testing

Generalized communication/interoperability evaluation/testing

Testing on all equipment for distribution & mobile workforce issues



Security

Audits

Penetration testing

Vulnerability assessments

Security interoperability / LEMNOS

Low-level / Hardware security impact assessment



Metering

AMI Functional Testing

AMI Acceptance Testing

AMI Test Practice Design

AEIC and C12 Metering Guidance



Other Laboratory and Testing Capabilities

Develop in-house high-level testing capability

Client implementation support

Provide education/training to vendors/utilities/regulators

Provide 'public service' education/training

Perform webinars/training videos of key testing issues/

FAQs/reference designs

SGL can review actual source code and perform intrusive testing



EnerNex

SGL provides our clients
multi-faceted assessment
services for communications, security, standards
compliance, technology/
vendor maturity, and
implementation assistance
across many Smart Grid
domains.

Learn More

Check out our website, www.smartgridlabs.com

Follow us on Twitter, www.twitter.com/enernex

Call 865.218.4600

620 Mabry Hood Road, Suite 101 Knoxville, TN 37932