NTS Services Spotlight: Energy

Smart Grid Testing

Smart Communications Experts

NTS is uniquely situated to assist developers, manufacturers, and utilities in the roll-out of smart grid solutions. We regularly perform testing on a variety of Smart Energy/Smart Grid products with a focus on communications functionality. We can cover the latest products and protocols, including:

- Smart Meters
- Smart Outlets
- Thermostats/In-Home Displays
- Smart Appliances

As a total solutions provider, NTS can perform testing with not just the communications/networking protocols, but also a wide range of supportive testing, such as:

- Reliability Testing (repetitive on/off, etc.)
- Environmental (temperature, humidity, sand/dust, rain, etc.)
- Safety Testing (EMI/EMC)
- Regulatory (FCC, CE, Japanese, TELEC, etc.)
- Accuracy (ANSI C12.1/ C12.20, etc.)
- Portal Testing (web, backhaul, field, etc.)

In addition, we can also assist with field trials, the development and execution of custom certification programs, and even in the creation of your own testing lab through a build-operate-transfer (BOT) project.

Standards Based Testing

NTS works diligently to keep up with the latest standards being selected for worldwide compliance for Smart Grid products, including the NIST "foundational smart grid standards, including: IEC 61970 & IEC 61968, IEC 61850, IEC 60870-6, and IEC 62351, as well as hardness standards, such as IEEE-1613.

Customer Software & Web Portal Testing

For customers who plan to roll out an application or website to monitor a “Smart Energy” home, NTS can test for compatibility over a wide range of operating systems and web browsers. We also execute performance/stress testing using automated tools to see how your product will handle the increased traffic from your customers and the “Smart Energy” devices. We perform testing of your website to verify that it meets U.S. Government’s Section 508 accessibility standards, or the accessibility standards in the regions in which your products will be released.

About NTS

NTS provides test, inspection and certification services to help clients build better, stronger, safer, more reliable products. Our clients see us as an extension of their own teams, filling internal gaps and providing the expertise required to bring products to market quickly and efficiently. NTS engineers and technicians have extensive knowledge of current test and conformity requirements, both domestic and international. With over 50 years of experience and a nationwide network of laboratories, we bring a unified solution to a global market.