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## GE Delivers Industry-Leading Level of Safety with Network Transformer

- *GE's Safe-NET Network Transformer's Patented Tank Design Reduces Risk Resulting from High-Energy Fault Events and Ruptures*
- *Design Exceeds ANSI/IEEE Pressure Requirement Standards*
- *Best-in-Class, Corrosion-Resistant Paint Minimizes Maintenance, Improves Transformer Life Cycle*

**ATLANTA**—July 9, 2014—Most major cities in North America today have electrical distribution networks contained under sidewalks, roadways, and inside buildings to reliably serve dense electrical loads that large, metropolitan areas require. The transformers that are used in these applications are referred to as network transformers. The nature of these installations requires the network transformers to be installed in close proximity to pedestrian and other traffic.

Because of this placement, safety is the highest priority for the underground network and specifically the network transformer. When high energy transformer events occur, which can lead to uncontained ruptures and collateral damage, utilities need to be sure that the network transformer can safely handle and dissipate that energy within the vault and away from pedestrians.

GE's Digital Energy business (NYSE: GE) has addressed these operational and safety challenges with the introduction of its new **Safe-NET Network Transformer**, providing utilities with an industry-leading level of safety.

The first product of its kind in the industry, GE's Safe-NET Network Transformer features a patented tank design that improves the strength of the transformer. According to Patrick Mathieu, engineering manager for GE's Power Delivery business, "The Safe-NET transformer is one of the most significant advancements in technology for network transformers in the past 50 years: it is 2-3 times stronger than traditional network transformers". Additionally, he says "This allows for most events to be contained within the tank without rupture, and in extreme events provides for a locally contained release, providing safety for nearby pedestrians."

The rigorous testing that GE's Safe-NET Network Transformer and its patented tank technology have been through, along with its safety features, offers operators and utilities added peace of mind. "Any time electricity is distributed, safety is on the mind. Along with reliability, service continuity and maintenance, safety is a key performance indicator of a utility's power distribution operations," said Alan Swade, general manager for GE's Digital Energy Network Transformer business. "With its patented tank technology, our new Safe-NET Network Transformer helps resolve safety concerns, reducing risks for both the utility and its customers."

Confirmed by KEMA testing, the network transformer is capable of withstanding over 11 megajoules of energy (as opposed to 4 megajoules for standard transformers), and its tank design exceeds the pressure requirements laid out in ANSI/IEEE C57.12.40 standards. The unit also has been seismic tested to meet the maximum (ground level) seismic levels expected in North America, validating that the transformers are expected to withstand the mechanical vibrations of an earthquake.

Safe-NET transformers are designed to supply power to the network bus and handle significant short-term overload. In addition, the unit's compact and configurable design enables GE to provide one of the smallest network transformer (kilovoltamperes per cubic inch) in the industry to fit most of the smallest vault installations. The transformers' best-in-class, corrosion-resistant paint minimizes maintenance to prevent corrosion over the long haul, increasing the life cycle of the transformer. The zinc epoxy primer and black epoxy top-coat paint utilized is superior to any other paint solution used today, passing 10,000-hour salt-spray certification tests.

GE's Digital Energy business is a global leader in transmission and distribution solutions that manage and move power from the power plant to the consumer. Its products and services increase the reliability of electrical power networks and critical equipment for utility, industrial and large commercial customers. From protecting and optimizing assets such as generators, transmission lines and motors, to delivering analytic tools to help manage the power grid, and providing uninterruptible power, GE's Digital Energy business delivers industry-leading technologies to solve the unique challenges of each customer. For more information, visit <http://www.gedigitalenergy.com/>.

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