



### GE Executive Outlines Opportunity for Transformation of U.S. Energy Future

- *Address at Advanced Energy 2010 Conference Offers Glimpses of Future Based on the Choices Government, Utilities and Consumers Make Today*
- *Even Small Improvements over the Next 20 Years Could Wipe Out Emissions and Deliver Electricity Savings Equivalent to 2010's Entire Energy Output*

ATLANTA, GA.—November 8, 2010—The evolution of a smarter power grid in the United States and the resulting impact it could have on the economy and environment were highlighted in a keynote address by GE's (NYSE: GE) Bob Gilligan at the Advanced Energy 2010 Conference today. Gilligan explained how even conservative adoptions of technology solutions could enable Americans to sustain and improve their energy-dependent lifestyles.

"While revolutionary energy technologies are developed each day, the way we apply them to modernize and nurture our electrical infrastructure is really more of an evolution than a revolution," said Bob Gilligan, vice president—digital energy for GE Energy Services. "What's important is taking steps today to lay the foundation for our growing energy appetite. We can then sustain ongoing efforts to improve our energy landscape."

Using conservative technology growth estimates, Gilligan laid out a scenario where the total U.S. energy consumption and emissions saved between 2010 and 2030 could exceed the entire electrical consumption and electrical CO<sub>2</sub> output for all of 2010.<sup>1</sup> "The net result would be like 2010 never happened," he explained.

In addition to the energy and pollution savings, Gilligan's scenario saw the creation of 140,000 sustainable new jobs and an electrical landscape that includes 3.3 billion fewer customer outage minutes. These power reliability improvements could result in savings of \$65.7 billion from reduced power interruptions by 2030<sup>1</sup>.

Gilligan supported his call for an energy evolution with a bevy of facts about the future of energy, including:

- Growing cities that will house more than 60 percent of the world's population and consume a vast majority of its power by 2030 cannot rely on an infrastructure designed a century ago<sup>1</sup>
- Global electricity demand is forecasted to increase 75 percent by 2030<sup>2</sup>
- Energy costs are increasing worldwide; US rates increased an average of 42 percent between 2000 and 2007<sup>3</sup>

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<sup>1</sup> United Nations Population Division, "World Urbanization Prospects: the 2007 Revision."

<sup>2</sup> Source: International Energy Agency World Energy Outlook 2009

- More than 40 percent of current environmental emissions are from electric generation<sup>4</sup>
- Approximately half of the transformer assets in the U.S. electrical infrastructure are at or approaching the end of their design life<sup>5</sup>

“The good news is that we are not talking gloom and doom,” Gilligan said. “Our electrical future can be a story of potential, opportunity and global competitive advantage. With increased reliability, efficiency and sustainability, we’ll be able to power traditional economic growth and be ready for the next generation of life-changing technology. We can do it by taking measured, affordable evolutionary steps. However, we, as a country, must act today.”

Gilligan cited electric cars, along with increasing levels of wind and solar energy, as examples of technology-enabled advances on the not-too-distant horizon. A copy of his presentation is available on [www.itsyoursmartgrid.com](http://www.itsyoursmartgrid.com)

## About GE

GE (NYSE: GE) is a diversified infrastructure, finance and media company taking on the world’s toughest challenges. From aircraft engines and power generation to financial services, health care solutions and television programming, GE operates in more than 100 countries and employs about 300,000 people worldwide. For more information, visit the company’s website at [www.ge.com](http://www.ge.com).

GE serves the energy sector by developing and deploying technology that helps make efficient use of natural resources. With nearly 85,000 global employees and 2009 revenues of \$40 billion, GE Energy [www.ge.com/energy](http://www.ge.com/energy) is one of the world’s leading suppliers of power generation and energy delivery technologies. The businesses that comprise GE Energy—GE Power & Water, GE Energy Services and GE Oil & Gas—work together to provide integrated product and service solutions in all areas of the energy industry including coal, oil, natural gas and nuclear energy; renewable resources such as water, wind, solar and biogas; and other alternative fuels.

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<sup>3</sup> U.S. Energy Information Administration – Annual Energy Review 2009

<sup>4</sup> International Energy Agency

<sup>5</sup> William Bartley, P.E. Hartford Steam Boiler Inspection & Insurance

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<sup>i</sup> Findings are based on a GE study conducted in 2010. Main study sources include:  
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