Testimony before

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Introduction

Chairman Gordon and Ranking Member Hall and members of the Committee, it is privilege to share with you GE's thoughts on the "National Water Research and Development Initiative Act of 2009."

Background

GE is a diversified global infrastructure, finance and media company that provides a wide array of products to meet the world's essential needs. From energy, water, and transportation to healthcare and security, we deliver advanced technology solutions through a broad business portfolio to promote cleaner, more efficient energy alternatives, increase the availability of clean, safe water, improve access to quality healthcare and enhance the safety and security of the public at-large.

As General Manager of Technology for GE Water & Process Technologies in Trevose, Pennsylvania, and as a former senior technology leader at GE's Global Research Center in Upstate New York, I know firsthand the considerable stake and investment that GE has in clean water research and development.

GE Water and Process Technologies is a leading global supplier of water treatment, wastewater treatment and process systems solutions. Our treatment systems provide clean, safe drinking water to millions of people in water-scarce regions around the

world. They also are a critical resource for helping industries minimize water usage in support of their operations.

GE's Global Research Center, located outside of Albany, is one of the world's largest and most diversified industrial research labs and the first to be established in the U.S. From the light bulb, medical x-ray and the first U.S. jet engine to more recent product breakthroughs such as digital x-ray, the GE-90 and GEnx aircraft engines and the best in-class Evolution Locomotive, the Center has a long and proud heritage of developing the breakthrough technologies that enabled these revolutionary products to be introduced into the marketplace.

Today, the Center has a world-class team of scientists and engineers working on the next generation of technology solutions to make water more accessible and more affordable. From reducing the cost of desalinated water to tap abundant saltwater resources to maximizing our ability to treat and reuse wastewater, we believe that technology holds the key to successfully addressing an increasing water scarcity epidemic.

Congressman Gordon, we applaud your efforts to establish a national initiative focused on clean water and research development. It could not come at a more critical time for our nation and for the world. According the United Nations, 2.8 billion people around the world already live in water stressed regions. By 2025, this number is expected to nearly double to 5.3 billion – more than two-thirds of what the forecasted population will be at that time.

With shifts in population and our existing water resources being constrained, the U.S. is feeling this impact as well. In the southwest US, freshwater aquifers have been depleting at a time when population in the region has been growing. In New England, groundwater contamination is a growing issue. At the Colorado River Basin, competition for water access has become a real source of political and economic tensions. Also,

Washington D.C.'s drinking water supplies continue to be threatened by lead and other contaminants.

Comments and Recommendations

"The National Water Research and Development Initiative Act of 2009" would represent a positive step forward to strengthen the planning and implementation of water research and development across the nation. The Federal government's role in providing structure and oversight will help accelerate new developments in a more coordinated way. But beyond structure, we believe the bill should be more inclusive to ensure that industry has an equal seat at the table with the other key stakeholders.

If we want to truly change how our nation thinks about water, it is going to take a community of government, the national labs, academia and industry working together in unison.

Companies like GE are on the front lines of the water scarcity epidemic. We have a keen understanding of where the water stressed areas are located and the unique challenges each faces. Most importantly, we have product solutions in the market today and advanced technologies in the pipeline for tomorrow to address our nation's water problems.

We understand how to industrialize research. It's part of our livelihood to take new technologies and find ways to commercialize them in the marketplace where they can add value and solve problems for our customers.

When you have a community that is both strong in cultivating and developing new ideas and equally effective in achieving an end-result, success will be a sure thing. Giving

industry an equal seat at the table will ensure that promising ideas translate into real commercial product solutions.

GE knows firsthand the value that can be added when you have a community of government, industry, academia and other stakeholders all working together. It is a key foundation of our ecomagination initiative. Ecomagination, first launched in May of 2005, represents GE's commitment to drive the development of green products and technologies to solve the world's toughest environmental challenges.

As part of this commitment, GE is doubling its level of investment in clean research and development from $700 million in 2005 to more than $1.5 billion by the year 2010. Since ecomagination was first launched, we have increased the number of green products from 17 to more than 60 products today. GE's success has been due, in large part, in our ability to coordinate with government, with our customers and with other industry partners to promote key technology developments.

Included within our portfolio of ecomagination products are a dozen products related to water treatment and purification. And we have new technologies in desalination, wastewater treatment, water reuse and advanced membranes at GE's Global Research Center to promote new clean water developments for the future.

In fact, we are currently working with the federal government and other partners on various clean water projects. For example, scientists and engineers at GE Global Research are partnering with the U.S. Department of Energy (DOE) on a project to develop new technologies for the treatment of impaired water for industrial cooling

applications. The goal is minimize water discharge and enhance water re-use. We also are working with the DOE to optimize a system for wastewater treatment, which would help reduce the cost of energy for systems run by municipalities and various industries.

Encouraging more water reuse through the treatment of impaired water and improvements to wastewater treatment systems are great examples of how we are developing new and better ways to clean water. Beyond what industries like GE are doing, we also are seeing innovative technology being developed by our universities and national labs to maximize the use of our precious water resources..

Ultimately, it will come down to how these technologies get deployed. Are they meeting the proper regulatory requirements? Do they measure for impurities in a way that ensures water is safe? Are they minimizing energy usage, so that industry can deploy these technologies in a cost-effective, environmentally friendly way? This last question is especially important. One of the biggest impediments to deploying new clean water technologies is the high cost of energy. With GE's experience in designing systems, developing technologies and optimizing systems for minimized energy usage, this last goal is well within our reach. Again, that is why it will take a community.

In closing, it makes sense that having a fully coordinated strategy for addressing our nation's clean water needs will require more direct involvement from private industries like GE. We have a robust R+D pipeline and a direct path to market for new solutions. Working together with Federal government and the other key stakeholders, we will have the community we need to successfully carry out a national clean water research and development initiative.

Chairman Gordon and members of the committee, thank you for your time and the opportunity to provide our comments and recommendations on this bill.

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