

Written Testimony

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To

**United States Senate
Committee on Environment and Public Works
Subcommittee on Green Jobs and the New Economy**

In re

Innovative Practices to Create Jobs and Reduce Pollution

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Good morning Chairman Sanders, Ranking Member Boozman, and Members of the Subcommittee. It is an honor to appear before you today on behalf of National Grid to discuss our energy efficiency programs. My name is Edward White, and I am Vice President of Energy Products for National Grid. I manage National Grid's energy efficiency initiatives and have seen first-hand the potential for efficiency-focused investment to create jobs and reduce emissions. National Grid supports the Subcommittee's efforts to advance energy efficiency.

About National Grid

National Grid is an international energy delivery company based in Waltham, Massachusetts, and Brooklyn and Syracuse, New York. Our parent company, National Grid plc, is based in the United Kingdom. National Grid provides electricity to approximately 3.3 million customers in Massachusetts, New Hampshire, New York and Rhode Island, and manages the electricity network on Long Island, New York under an agreement with the Long Island Power Authority (LIPA). In 2009, our electric utilities delivered close to 32 million megawatt-hours of electricity to power homes, schools, businesses, and factories across our service territories. We are the largest distributor of natural gas in the

northeastern United States, serving approximately 3.4 million customers in Massachusetts, New Hampshire, New York, and Rhode Island. National Grid also owns over 4,000 megawatts of contracted electricity generation that provides power to over one million LIPA customers. We are one of the largest utilities in the United States, as measured by total customers.

We welcome the opportunity to speak about energy efficiency before this Subcommittee. In these uncertain and troubling economic times, making smart investments is of paramount importance. Our country needs job creation. Our country needs energy security. Our country needs cleaner ways to power our economy. Investing in energy efficiency has the potential to help address each of these challenges.

National Grid has been at the forefront in the push to implement energy-savings programs. The three states that incorporate the largest portions of our service territory— Massachusetts, New York, and Rhode Island – have each set goals of reducing energy use by as much as two percent per year. These states, along with 23 others, have recognized that energy efficiency is the cheapest way to meet new and existing demand. Many utility regulators have established rules that require utilities, such as National Grid, to invest in cost-effective energy efficiency before investing in new power plants.

Working with our regulators at the state level, and with local energy efficiency services contractors, we have deployed programs to invest millions of dollars to enable our customers to make cost-effective energy efficiency improvements. These projects have yielded positive returns for our customers, created jobs for thousands of workers, and saved millions of megawatt-hours of electricity.

Cost-effective energy efficiency measures allow us to provide customers with one kilowatt-hour of energy savings for between three and five cents. In comparison, customers around

the United States pay between 6.5 cents and 16.5 cents for their electricity, depending on where they live. As a result, investing in energy efficiency can typically produce three to four dollars of savings for each dollar invested. In 2012, our total savings through new energy efficiency investment in Massachusetts is expected to be over one million megawatt-hours – as much electricity as 92,000 typical homes would use in a year.

National Grid's energy efficiency programs have been growing steadily in each of the states where we operate. Working with the state regulators in Massachusetts, New Hampshire, New York, and Rhode Island, we have established a total budget of over \$1 billion for energy efficiency programs from 2010 through 2012. As with many utility-sponsored efficiency programs, this money comes from both public and private sources. We have a variety of ways to deploy the funds, ranging from rebates to interest rate subsidies to customer loans.

As our efficiency programs undergo rapid growth, we rely increasingly on customer payment plans that allow our customers to make energy efficiency improvements and pay for them in installments on their electric bill. We have seen this to be a highly effective way to spur energy efficiency investment. In essence, this so-called "on-bill" repayment method provides customers a way to enjoy energy savings today, but pay for those savings over time. It encourages customers to make capital improvements that they would not have otherwise made. Every new project means additional jobs, additional reductions in energy use, and fewer emissions. Energy efficiency provides these benefits while at the same time it delivers long-term savings to customers by reducing individual electric bills and bringing down the cost to procure electricity for our customers.

Most of National Grid's on-bill repayment programs have focused on the small commercial customer segment, but we are likely to expand to other segments as our programs evolve. Our experience shows that on-bill repayment arrangements have low default rates. Customers are already in the habit of paying their monthly electric bill, and the energy

savings from efficiency measures often exceed the amount added to their bill. The structure is very easy for customers. We have measured default rates of between zero and 3.5 percent, depending on the customer class. These rates would be considered well within the range of “investment grade” using current credit rating systems.

Another benefit of on-bill repayment programs is that they can incorporate funding from outside lenders. In fact, much of the projected growth in our three-year plan relies on outside funding sources: \$180 million of it, to be precise. This money comes from third-party lenders – not from the utility, customers, or the public benefit funds overseen by the utility commission. Our on-bill programs mobilize this capital to create immediate economic benefits.

On-bill repayment programs have been used successfully by National Grid to fund capital investments in an array of state-of-the-art, energy efficient technologies. We and our customers have invested in water heaters and boilers, pumps and drives, lighting, insulation, and air sealing. Each project draws a long list of implementation partners: local contractors and installers; equipment manufacturers and distributors; engineering firms; architects and many others.

Here are some examples of how our energy efficiency programs have worked:

- National Grid worked on a large lighting project with a major hotel in Warwick, RI. The hotel replaced out-of-date halogen and incandescent light fixtures and installed approximately 1,900 LED lamps along with fluorescent lamps and ballasts. The project saved the hotel over one million kilowatt-hours per year. The use of on-bill repayment enabled the hotel to defer the initial capital expense and generate immediate positive cash flow.
- On-bill repayment was instrumental in helping the city of Cranston, RI undertake an energy-efficient lighting project in the school department. The project involved the replacement of 48 inefficient gymnasium light fixtures with energy efficient fluorescent fixtures at a middle school. The project would not have happened without the on-bill repayment program, because the city lacked the funds needed to make the capital investment. The city is now able to pay for the project out of savings on its electricity bill.

- In Massachusetts, five schools in a southeastern Massachusetts school district saw energy savings potential but had no capital budget. National Grid provided technical assistance and set up an on-bill repayment arrangement that ensured the school district would see positive cash flow from energy savings due to upgrades to lighting and building systems.
- On-bill repayment has made numerous other projects possible for building owners that lacked the capital reserves to make the necessary up-front investment. In Providence, RI a grocery store replaced outdated, inefficient lighting. In Cumberland, RI an architectural woodworking company, also undertook a project to replace inefficient area lighting.

Through on-bill repayment programs we are creating economically sound projects that pay for themselves –putting Americans to work, modernizing our buildings, schools, and homes, and reducing emissions. Energy savings and economic growth are consistent. From 1999 through 2009, Massachusetts’ economic output grew by nearly four percent per year, but the state’s electricity consumption only grew less than one percent per year.¹ This is exactly the sort of trend we need at a national level.

Therefore, we welcome the efforts by the Subcommittee to evaluate appropriate federal incentives for energy efficiency programs. We also respectfully encourage you to recognize existing state-level energy efficiency programs and consider complementary policies that would maximize their economic impact.

National Grid would be pleased to work with the Subcommittee to identify and evaluate options for federal legislation. Thank you for your consideration. I would welcome any questions you may have.

¹U.S. Department of Commerce, Bureau of Economic Analysis; Energy Information Administration, 2009.