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Chairman Markey, Ranking Member Sensenbrenner, and members of the Committee, I am honored to appear before you today on behalf of Public Service Enterprise Group (PSEG).

PSEG is a diversified energy company with more than \$28 billion in assets and more than \$12 billion in annual revenues. Our family of companies distributes electric and natural gas energy to more than two million utility customers in New Jersey, and owns and operates approximately 16,000 megawatts (MW) of electric generating capacity in New Jersey, New York, Pennsylvania, Connecticut, Texas, California, New Hampshire, and Hawaii. This is a diverse generating fleet in terms of fuel source and technology and includes about 2,400 MW of coal-fired capacity and almost 3,500 MW of nuclear capacity.

Let me preface my comments by stating that PSEG believes climate change is a real and profound environmental threat and that society's response to this threat represents the

defining issue of our time. In fact, PSEG has been factoring climate change into its business decisions and investments since the 1990s. I highlight below some of the many steps we have or are taking to contribute to a low-carbon future:

- Public Service Electric and Gas company, our New Jersey utility, was the first in the country to sign onto a pre-Kyoto voluntary reduction accord with the Clinton Administration to stabilize greenhouse gas emissions to 1990 levels by 2000. We met this target.
- In 2004, PSEG entered into a new commitment with the Bush Administration to reduce its domestic greenhouse gas emission rate by 18% from 2000 levels. We are on track to meet this commitment by next year, despite increasing total generation output by more than 50%.
- PSEG maintains a comprehensive company-wide greenhouse gas inventory. For over a decade, it has been reporting greenhouse gas emissions to the Department of Energy's Voluntary Greenhouse Gas Reporting program.
- We partnered with the Natural Resources Defense Council and CERES to benchmark power plant emissions of the 100 largest generators in the U.S. to highlight trends and stimulate action.

- PSEG is a Hall of Fame winner of EPA's Wastewise voluntary waste reduction program. The company has been recycling over 90% of its solid waste for more than a decade. Solid waste is a source of greenhouse gas emissions.
- Since 2003, PSEG has been using up to 1.5 million gallons annually of a biodiesel blend in its vehicle fleet. As a result, we have reduced greenhouse gas emissions from diesel vehicles by 20%.
- PSEG is a member of the EPA's voluntary Natural Gas Star program and is making steady progress in reducing leakage throughout its utility's gas delivery system.
- PSEG supports PowerTree Carbon Company, which is currently investing in 6 reforestation projects in the U.S. These projects involve planting 3,600 acres of trees, which are projected to capture and sequester more than 1.6 million tons of CO2 over the project lifetime.
- PSEG is also an equity owner in Clean Air Action Corporation, which is investing in tree plantings in Africa. The program, called TIST, empowers small groups of subsistence farmers in countries such as Tanzania, Kenya, Uganda and India to reverse the devastating effects of deforestation, drought, and famine while capturing and reducing CO2 in the atmosphere. Over 3 million trees have been

planted to date and will result in the sequestration of up to 3 millions tons of CO2 over 30 years.

PSEG recently announced a commitment to further improve the efficiency of our electric delivery system and operations, through the following initiatives:

- PSEG is investing in new, state-of-the-art primary and secondary distribution cables and new energy-efficient transformers. We will be installing approximately 170 miles of new or replacement cables a year. We are already using higher-efficiency transformers that meet the U.S. Department of Energy's recommended 2009 standard, and are on track to invest as early as next year in units that meet the Energy Department's proposed 2013 efficiency standard.
- We are accelerating the transformation of our vehicle fleet by replacing 1,300 cars and light trucks with hybrid electrics. Under this program, we will become one of the first utility companies in the nation to use hybrid electric aerial lifts commonly known as bucket trucks. In addition, we're retrofitting 450 traditional bucket trucks with electric drives to power the lifts.

When fully in place these vehicle fleet and distribution system initiatives will reduce PSEG's carbon footprint by about 150,000 tons a year.

These initiatives show that making investments in carbon reduction can be both good for the environment and good for the bottom line. This is particularly true for utilities if State regulators recognize the importance of carbon reduction and allow investments into rate base.

And yet we recognize that these actions, though significant, represent only a fraction of what needs to be done to move to a low-carbon economy. Charting a path to sustainable growth in a carbon-constrained world will require nothing less than a transformation in how we heat our homes, fuel our vehicles, power our businesses, and farm our land. It will require that we rethink the very way in which we live.

A challenge of this magnitude necessarily creates uncertainties for the affected industries, and that includes the electric sector which is responsible for nearly 40 percent of the nation's greenhouse gas emissions. As I look to the horizon, however, I see business opportunities for energy services companies like PSEG in the areas of energy efficiency, renewable resources, and investment in clean, central station power. I also believe energy utilities are uniquely positioned to help customers participate in the required transformation by helping them make wise energy choices.

A New Regulatory Model for Energy Efficiency and Renewable Technologies

PSEG believes that energy efficiency should be the “first fuel” for meeting energy requirements in a carbon-constrained world. Indeed, some studies indicate that nearly a

quarter of the emissions reductions needed to stabilize atmospheric greenhouse gases at a level protective of the environment (500 parts per million) can be achieved through energy efficiency improvements. These are measures that can be employed right now using existing technology. For example, in 1970 a typical 18-cubic-foot refrigerator consumed around 2,000 kilowatt/hours of electricity annually. Today, an Energy Star refrigerator of the same size consumes about one-fifth of that amount.

Customers must actively decide to participate in this strategy, but it is difficult for most customers to move beyond the upfront cost of an energy efficiency investment. Whether this involves a residential consumer deciding between a traditional incandescent light bulb and a compact fluorescent, or a business manager deciding on the merits of a new, energy efficient boiler, the perceived risk associated with achieving the energy savings is too high. In short, there is a flaw in the current functioning of the market whereby investors (in this case, customers) apply an inappropriately high hurdle rate to energy efficiency investments.

PSEG and other energy utilities are uniquely positioned to change this dynamic. Utilities have brand recognition and have earned the trust of customers. Utilities engage in millions of interactions with customers every day and employ a highly skilled and dedicated workforce that can be engaged to promote efficiency. Utilities can help ensure that all consumers – homeowners, renters, urban residents, low-income customers, and small businesses – as well as large industrial and commercial customers, have access to, and the opportunity to benefit from, energy efficiency. Utilities also have the ability to

make long-term investments that serve the public. Allowing utilities to deploy this kind of “patient capital” and make the efficiency investments on the customer side of the meter will maximize development of energy efficiency across society. After all, this patient capital investment model made universal access to energy and energy services a reality, and a similar approach can make universal access to energy efficiency a reality.

This will all require a paradigm shift in how utilities are regulated. Utility companies must be given an opportunity to earn reasonable returns on these efficiency initiatives so they are viewed the same way as investments in pipes and wires.

If energy efficiency is the first fuel, renewable resources are a close second. PSEG has announced a plan to invest approximately \$100 million to help finance development of solar energy in New Jersey. Under this plan, PSEG would work with solar developers to provide loans covering 40 percent to 50 percent of the cost of solar installations.

Availability of this financing will make solar energy more accessible and affordable for households and businesses. We expect this initiative will support development of approximately 30 MW of new solar capacity, enough power to supply 24,000 residential customers. In this case, the market is functioning properly but subsidies are needed to compensate for the cost disadvantages of renewable energy supplies. Utility financing and installation is potentially the least costly method to override these market forces.

PSEG is also advocating for an extension of the federal solar investment tax credit and removal of the exclusion that has prevented utilities from qualifying. This change can

provide a powerful incentive for additional solar energy investment. Extension of the credit and the modification allowing utility participation are included in both the House and Senate energy tax packages and we hope to see enactment this year.

A National Climate Change Program is Essential

Regardless of the strategy selected, be it energy efficiency or renewables, to activate the transformation to a low-carbon economy, we need a national greenhouse gas reduction policy that establishes a market price for carbon, drives the development of new, low-carbon technologies, and provides incentives for investment in and deployment of these new technologies.

Key issues include the type of program, level of reductions, harmonization with state and regional programs, the method for allocating emissions allowances, cost containment mechanisms, and consumer protections.

The best model for such a program is a national, economy-wide greenhouse gas cap-and-trade program that includes the electric sector, transportation, and other major industrial sources of emissions. Congress should enact a cap that requires a reduction in greenhouse gas emissions to 1990 levels by 2020 and establishes long-term targets that will achieve greenhouse gas concentrations in the atmosphere at a level that will protect against the consequences of a warming climate. We believe this means achieving an 80 percent reduction by 2050.

In the absence of a federal program, a number of states, including my home state of New Jersey, individually, and as part of regional compacts, have seized the initiative on climate policy. PSEG is a leading supporter of New Jersey Governor Corzine's directive to reduce energy consumption 20% and meet 20% of the state's energy requirements with renewable resources by the year 2020.

PSEG also supports the 10-state RGGI program in the Northeast that will implement an electric sector greenhouse gas emissions cap starting in 2009. However, it is critical that RGGI ultimately be transitioned into a comparable national program. While states should be able to innovate in areas such as energy efficiency, renewables, building codes, and appliance standards, we need one national, market-based cap-and-trade program, a single greenhouse gas emissions trading market, and consistent emissions reductions targets across all states. A patchwork of different greenhouse gas emissions targets among states and regions would increase costs for consumers in states with more stringent targets and create inequities for companies that compete in multi-state energy markets. It is, therefore, essential that Congress enact climate change legislation that is at least as stringent as the RGGI requirements and facilitates the transition of RGGI into a national program.

The Right Allowance Allocation Methodology

One of the key policy questions that Congress will decide is the method to distribute CO₂ emissions allowances to the electric sector. PSEG supports auctioning at least 25 percent

of electric sector allowances at the start of the program, transitioning to a 100 percent auction within 10 years. A portion of auction proceeds should be directed at research and development of advanced energy technologies such as carbon capture and storage and renewable resources. Providing incentives for these technologies serves the dual purpose of helping to reduce emissions while creating business opportunities and jobs in the U.S. And because consumers will bear the brunt of the cost of addressing greenhouse gas emissions particularly in the early years of the program, auction proceeds should also be set aside for low-income assistance.

For those allowances distributed to the electric sector at no cost, it is also essential that the allocation be accomplished in a way that provides incentives for the efficient production of electricity and drives the development and investment in advanced, low-carbon technologies. Allowances should not be distributed in a way that simply preserves the status quo.

I often hear that it is the level of the cap that ultimately determines the effectiveness of the program and that the allocation of allowances is an issue that matters only to electric generators. I disagree. Getting the allocation methodology right has implications not only for our industry but for households and businesses we serve, for entrepreneurs working to bring clean technologies to the market, and ultimately for the success of U.S. climate policy. For these reasons, PSEG supports an updating, output-based allowance allocation system that is based on a power plant's proportionate share of electricity produced. This approach will promote efficiency improvements in existing plants, spur investment in

new, higher efficiency plants, and help attract capital to emerging low-and-zero carbon technologies.

The most commonly referenced alternative to an output-based allocation is a system used for sulfur dioxide allowances under the Acid Rain program. This method, commonly referred to as the grandfathering approach, would distribute all allowances to existing generating facilities based on historic emissions (or fuel-adjusted heat input which effectively translates to historic emissions). We strongly disagree with the grandfathering approach because it creates a perverse incentive that should be avoided under a CO₂ cap-and-trade program. This system rewards companies with high-emitting, low-efficiency power plants that have made conscious business decisions not to invest in newer, cleaner, more efficient technology.

Cost containment is another important consideration. However, we also must be careful not to provide an easy out that would threaten the integrity of the program and undermine efforts to reduce emissions. In the early years, as low-carbon technology evolves, we would stress the important role for certified offsets. PSEG, in an effort to support a carbon trading system, has joined with four other energy companies to issue a Request for Proposals (RFP) for 10.5 million tons of high-quality carbon offsets. This effort is designed to help reduce the cost of compliance with regional – and anticipated federal – emissions reductions requirements as well as to help develop a robust and reliable carbon offset market. Such an offset market will promote innovative emissions reductions measures throughout the economy.

Mr. Chairman and members of the Committee, we believe that a combination of conservation and energy efficiency improvements, renewable energy, and clean, low-and-zero carbon central station power will be needed to achieve the low-carbon economy we envision. With the proper incentives set forth in national climate change policy and right regulatory models in our states, I am confident we can meet this challenge in a manner that will unleash our nation's innovative skills, create jobs, and truly transform our economy. PSEG looks forward to working with Congress to enact a national, cap-and-trade program that will deliver greenhouse gas reductions on a scale and timetable sufficient to protect the environment, allocate emissions allowances in a manner that will reward efficiency and innovation, and spur development and deployment of new, low-carbon technologies.